2025

TRANS DIGITAL RIGHTS

Improving Data Visibility, Privacy and Belonging for Gender-diverse Communities

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The primary purpose of the work presented in the following pages is to be another resource in a broad, transnational process of knowledge production, action and policymaking. We sincerely appreciate the communities showing us that hope and strategy can walk side by side in our pursuit of a more equitable world.

01

INTRODUCTION

INTRODUCTION

The transgender community faces many barriers in accessing adequate, inclusive services across the Americas.[1] Often invisible or misrepresented to governments and private service providers responsible for data collection, gender-diverse individuals must constantly negotiate the trade-off between data visibility[2] and fundamental rights. Being counted in demographics has the potential to help to understand the dimensions of these communities, with the aim to improve evidence-based policymaking. However, who is counting – how and when – is just as important to the process as actually being included in the official numbers.

As much as the fight for visibility is historical and fundamental, visibility without digital rights and data justice approaches can be dangerous. Here, digital rights refer to human rights in the digital environment, and data justice is the application of social justice principles and ethical paths in an increasingly datafied world.[3] We want to reimagine what a digital rights framework that centres transgender communities and allow them to thrive would look like. Frequently excluded from decision-making spaces and international digital rights fora,[4] a trans-centred approach to digital rights can take us steps further in safeguarding fundamental rights and shedding light on skewed power dynamics.

In this report, transness is conceptualized to encompass gender-diverse communities, including but not limited to trans, nonbinary, genderfluid, gender nonconforming, genderqueer, Two-Spirit and many other forms to exist beyond, across and within gender binaries. For these communities, data invisibility can be strategic, especially in contexts where human rights are threatened. Not only authoritarian and conservative governments attack trans rights, but as countries that have strong rights-based traditions are failing to offer basic protection to those at the margins of society. As an example, in late November 2024, the United States (US) had at least 559 anti-2SLGBTQIA+[5] bills being tracked by the American Civil Liberties Union (ACLU) at various government levels.[6] If we count the bills carried from the previous year, that number is as high as 672.[7]

The proposed bills target 2SLGBTQIA+ people in the US in various areas: 216 bills aim to impose restrictions on students' and educators' rights, 123 amendments to weaken civil rights laws, 116 propose restrictions on healthcare (many on gender-affirming care), 19 create barriers to accurate identification (ID)[8], and 13 bans on public accommodations. Even when defeated, the existence of these bills contributes to the fear and concerns among the trans community[9] and dehumanization of trans people,[10] which already causes harm and anxiety for the targeted communities.

Gender-diverse individuals systematically experience greater obstacles to access vital services—from education to health—because of their gender identity and/or expression. The barriers can be exacerbated depending on other social identities, such as age, race, ethnicity, disability, class, and income, making intersectionality an important component of building a trans-centred digital rights framework.[11] Based on this context, we take a critical approach to data protection and privacy in relation to access to services, infrastructure and spaces. There is a general lack of interest and preparedness of public and private systems, as well as academia, to responsibly collect and share data about gender identity, which results in a lack of community trust and flawed visibility mechanisms. Advancing data justice for gender-diverse communities requires a holistic approach, from working to prevent misrepresentation of gender markers (and how they relate to health[12] on identification documents and health records), to countering human rights violations (deadnaming,[13] misgendering, and privacy issues). It also must consider how these communities are perceived, seen, categorized, or excluded.

As governments, civil society organizations, scholars, and practitioners look to "queer data"[14] like sexual orientation, gender identity, and expression (SOGIE) data – especially in electronic health records (EHR),[15] census information and government data assets[16] – data justice, invisibility and misrepresentation issues need to be addressed. Invisibility makes it harder to understand the dimensions of the community; however, visibility of highly sensitive data without adequate safeguarding of human rights[17] might exacerbate inequalities, creating unintended harm.

Data privacy and protection[18] and an ethical approach to data use must be at the forefront of data justice discussions.[19] This should be mandated particularly within government institutions, as a critical safeguard for citizens' rights, to prevent state overreach and abuse of power.

This report emerged from a response to a request for information (RFI) prepared for the White House Office of Science and Technology Policy in 2022[20] and an exploratory project supported by the UVA Center for Global Health Equity.

THE PROJECT FOCUSED ON THE FOLLOWING QUESTIONS:

- What are the best practices in achieving data justice for gender-diverse communities?
- Are there specific issues we should address when advocating for gender equity and digital rights that are centred on trans individuals?
- If we could reimagine a digital rights framework that meaningfully includes transgender communities, what would it look like?

The work we present here is an attempt to fill in gaps in current research and advocacy as well as build bridges between the trans rights and digital rights movements. We hope it can be a useful resource for scholars, advocates, policymakers, legislators and private service providers, considering the obstacles and practical challenge that emerge when we try to combine principles and values with the operationalization "of those values in AI systems, applications, and governance structures."[21]

THE REPORT IS DIVIDED INTO SIX SECTIONS:

- Informing Data Collectors
- The Role of Citizen-generated Data
- Overview of the Intersection of Trans and Digital Rights
- Emerging Issues: Big Data and Artificial Intelligence
- Reimagining a Trans Digital Rights Framework
- Policy and Advocacy Recommendations

Currently, the worldwide disproportionate attack on transgender rights puts gender-diverse communities at risk. Combined with increasing surveillance and data collection, safeguarding human rights online has never been more crucial. Therefore, the promotion of an evidence-based policy agenda for gender-diverse communities must defend civil liberties and human rights in the digital environment.

With increasing automation of decision-making processes and incorporation of artificial intelligence (AI) models in even our most trivial life activities, there is an urgent need to pinpoint and draw attention to the impact of these technologies and systems in the transgender community specifically. We hope this report is a starting point for a much larger conversation, adding key components to the many voices fighting for transgender individuals and safeguarding our digital rights. These discussions overlap with long-standing questions around platform regulation, surveillance, privacy, large language models (LLMs), digital identification, and freedom of expression. By promoting a digital rights approach, the goal of this report is to enhance trust and safety in digital technologies for gender-diverse communities and allow them to be seen and included.

The report is built on lived experience, scholarship and years of engagement with technology policy in the Americas. It also is built on lessons from the open data community, especially the application of CARE Principles (Collective Benefit, Authority to Control, Responsibility, Ethics) envisioned by Indigenous coalitions,[22] the institutionalization of trans studies as a field and proposal of applied transgender studies perspectives[23] as well as the knowledge created by civil society organizations to advance a digital rights agenda.[24]

Trans people deserve care, access to services, safe and consentful[25] visibility, and the means to contribute in spaces where decisions about our future are made.

ENDNOTES

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2 We refer to data visibility as being visible in datasets, as well as the ability to see and access information about a specific topic, community or process.

3 Taylor, L. (2017). What is data justice? The case for connecting digital rights and freedoms globally. *Big Data & Society*, 4(2). https://doi.org/10.1177/2053951717736335

4 For example, the United Nations conferences on internet governance (UN IGF) and data (UN World Data Forum) do not allow individuals to choose a gender marker other than Male/Female and they use legal names as default, without an option for preferred names. Transgender people must comply with such harmful process of being deadnamed and misgendered to access the events or be left out.

5 It is the acronym used by the Government of Canada and adapted for the report. 2S: at the front, recognizes Two-Spirit people as the first 2SLGBTQI+ communities; L: Lesbian; G: Gay; B: Bisexual; T: Transgender; Q: Queer; I: Intersex, considers sex characteristics beyond sexual orientation, gender identity and gender expression; A : asexual; +: is inclusive of other people who identify as part of sexual and gender diverse communities, who use additional terminologies. More information on the terminology can be found here: https://www.canada.ca/en/women-gender-equality/free-to-be-me/2slgbtqi-plus-glossary.html

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8 According to ACLU (2024), these bills try to limit the ability to update gender information on IDs and records (birth certificates, driver's licenses and health records).

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13 We chose to use "deadnaming" here referring to intentional act of calling a transgender individual by their birth name, to portray it as a harmful and violent practice, and because it is the term occasionally used in the terms of service of social media platforms.

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[20] Some excerpts and arguments from the response are part of different sections of this report: Reia, J. (October, 2022). *Response to the Request for Information (RFI) on the Federal Evidence Agenda on LGBTQI+ Equity (87 FR 52083) submitted to the White House Office of Science and Technology Policy (OSTP).* https://datascience.virginia.edu/news/responding-federal-evidence-agenda-lgbtqi-equity-request-information.

[21] Attard-Frost, B. (2023). Queering intelligence: A theory of intelligence as performance and a critique of individual and artificial intelligence. In Klipphahn-Karge, M., Koster, A.-K., & Morais dos Santos Bruss, S. (Eds.). (2023). *Queer Reflections on AI: Uncertain Intelligences* (1st ed.). Abingdon and New York: Routledge.

[22] Research Data Alliance International Indigenous Data Sovereignty Interest Group. (September 2019). *CARE Principles for Indigenous Data Governance*. The Global Indigenous Data Alliance. GIDA-global.org.

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[24] See, for example, the Coalition for Independent Internet Research (https://independenttechresearch.org/) and the AI Sur consortium (https://www.alsur.lat/en).

[25] See the guide to build consentful tech: https://www.consentfultech.io/.

02

INFORMING DATA COLLECTORS

INFORMING DATA COLLECTORS

The lack of reliable data about 2SLGBTQIA+ communities is widely acknowledged, yet sparsely addressed by governments.[26] Gender-diverse communities rely on citizen-generated data and contributions of communities to data collection to be visible to policymakers while avoiding being targeted, using what has been called "strategic invisibility"[27] to address surveillance and safety concerns. The processes of datafication that our bodies are subject to – from connected devices to social media[28] – highlight the trade-off between being *counted* by institutions and being *protected*. This trade-off pushes gender-diverse communities to constantly negotiate their visibility and representation in datasets. Although we focus on policymakers and governmental agencies, "data collectors" can be broadly used to include companies, researchers and community members.

In general, it is not easy to collect data on gender-diverse communities because framing complex experiences into surveys whose results can be used as evidence requires knowledge, critical thinking, and community engagement. The questions and set of responses must acknowledge and encompass ever-changing terminology as well as the fact that gender identity can change over time. For example, the fluidity and processes of self-discovery, gender expression, coming out, and self-perception are important. Best practices, guidelines and examples for researchers, advocates and policymakers have been put forward by community members and specialists and evolve over time.[29]

Currently within the developing field of data science, there is a momentum to define the boundaries of the discipline. Issues of data ethics, policy, governance, and digital rights should be considered by academics, organizations and policymakers within this field as these issues are essential to advance the responsibility and equity within and beyond the discipline. Invisibility in official numbers, data use, and regulatory frameworks generates knowledge gaps. These issues also are related to a broader context in which public policies and politics play a central role.[30] From general data protection laws and official data collection mechanisms to policies for (or against) transgender communities, data equity is shaped by various sets of sociocultural and political conditions.[31]

Data collection and use that encompasses gender information poses risks, such as misrepresentation, invisibility, and a simplistic view of gender identities and expressions. The outcomes of these efforts may end up not being as effective to shape policies as the community want them to be or might be used in ways that harm the privacy and integrity of such communities. In the current political environment, SOGIE data and health data – especially those related to gender-affirming care (GAC)[32] – have become more sensitive and sought-after by both trans-supportive actors and those intending to harm the trans community.[33] Data dissemination and sharing also pose risks related to data privacy and data protection, requiring a robust set of policies and guidelines to make gender-diverse people visible in a safe, human rights-based approach.

Combined data, the result of combining data from multiple sources into a single, unified dataset, might be useful to understand how the community's self-identification exists in relation to other categories, such as in current US census survey questions on gender identity.[34] These single categories are useful as an overview of people whose gender identity is not contemplated by the gender binary and can help us to consider characteristics of 2SLGBTQIA+ adult population more broadly. However, combined data in the case of gender-diverse communities might render relevant details invisible because gender is experienced in a myriad of ways. Given the fluidity and diversity of gender identities and expressions, fitting them into pre-established categories available for multiple-choice responses is complicated and may hinder access to valuable knowledge that could be used to inform better policies.

At the same time, we still need consistent, open data to comprehend generational gaps, regional differences and similarities, the urban and rural divide, access to education, employment and labor market, housing, health (especially mental health), veteran status, access to public service and public infrastructure – always keeping in mind safeguarding data privacy and protection, balancing visibility and a human rights-based approach (HRBA)[35] to shed light onto gender-diverse communities. Careful consideration should be put into issues around immigration and legal status, for example, and other contexts where de-anonymization is possible.

Learning from other countries' experience is important – despite differences in context, population size, and policy and regulatory frameworks, some of the challenges are similar and the public debate around SOGIE data collection is currently unfolding in multiple places.[36] Canada, for instance, became one of the first countries to provide census data on transgender and non-binary people following extensive consultation and countrywide engagement with the Canadian population to change the census in 2021.[37] According to the Canadian government, "the precision of 'at birth' was added to the sex question on the census questionnaire, and a new question on gender was included. As a result, the historical continuity of information on sex was maintained while allowing all cisgender, transgender, and non-binary individuals to report their gender."[38]

The Canadian government addresses the "diversity within gender diversity" for non-binary people via a write-in response so that they can indicate the correct term most relevant to them – with a response rate of over two-thirds of the people aged 15 and older. Words like "fluid," "agender," "queer," "gender neutral," "Two-Spirit," and "gender-nonconforming" were prevalent, showing the various subcategories to the nonbinary gender identity.[39] Some of these terms, such as "Two-Spirit," are specific to Indigenous peoples and territories, proving that a more comprehensible set of categories and terms can help us understand the intersectionality of gender identity and, hopefully, advance equity and inclusion for systematically marginalized communities. Therefore, considering Indigenous-designed principles for data use is crucial in this process.

Prior to adding questions on gender identity to surveys, data collectors should ask themselves what exactly they are trying to understand when asking questions about gender. First, questioning whether collecting data on sex assigned at birth and trans status is necessary is another path to be explored.[40] As an informed data collector, the process of collecting data should start by considering if the data is indispensable (assuming data protection was taken into account), followed by a thoughtful analysis of the best way to collect the data (e.g. 2-step approach, write-in, single gender measure with expanded gender instead of sex options, etc.).[41]

Overall, questions related to sex assigned at birth, gender identity and expression might be considered insensitive or triggering, especially when one considers the many barriers transgender people can face to have their gender markers and legal names changed – a process also deeply connected to legal status, class, support networks, and financial resources. Additionally, tying responses to court orders, legal processes, and the medicalization of gender-diverse communities is harmful, limiting the accuracy of the data collected and the possibilities for gender identity and expression. In this case, a focus on combined data about gender identity might be more relevant.

Whenever gender identity data is must be collected, agencies should encourage public response to questions by

(1) safeguarding rights and ensuring that visibility in datasets is not risky or threatening, especially in contexts where human rights violations directed at transgender individuals are on the rise.

(2) working with local community-based organizations and advocates to build trust through the agreement if gender data should be collected in the first place, mutual understanding of categories being used and clear definition of mechanisms in place to safeguard privacy.

(3) designing survey questions and sets of responses that respect the complexity of gender identity and expression as much as possible, leaving space for nuance, disagreement and contradictions.

(4) prioritizing meaningful engagement between data collectors and participants based on non-extractivist approaches and expansive views on valid data. Whenever possible, data collectors should compensate community members and organizations for the time and expertise that will help shape the questions.

(5) investing in capacity building for people using data of gender-diverse communities, which can take the form of toolkits, talk series, online platforms with relevant content, collaborative workshops and seed funding. This investment can be made by

universities to train researchers at all levels of their careers, governments to train civil servants and other staff collecting gender data, companies that perform gender data collection providing workforce development for employees, and civil society organizations offering more substantial training in gender diversity to its advocates.

(6) creating strategies to prevent harm that are the responsibility of multiple stakeholders. The strategies can be created and implemented by government, intergovernmental agencies, community-based organizations, civil society organizations, researchers and industry, such as the capacity building described on item (5), but also developing risk and impact assessments before collecting the data. This process also includes strategies to mitigate bias based on best practices widely debated and developed by, for and with the communities.

To better communicate with the public about methodological constraints to collecting and publishing SOGIE data, government agencies must have open channels of communication that are welcoming to transgender people. For example, using preferred names, respecting gender markers, making it accessible to people with disabilities, and making it available in more than one platform. Government agencies also must work consistently to improve the awareness, sensibilization, and training of civil servants working with gender-diverse people.

Over the last decades, there has been valuable knowledge produced and collected by civil society organizations, grassroots movements, and academia. Following best practices and guidelines for gender identity, questions established in community-based surveys can be an important step to encourage public response to SOGIE questions. For instance, the Center for American Progress states that "response options must be adapted to meet the needs of the specific 2SLGBTQIA+ population being surveyed;" some of the practices mentioned include accurately translating questions and materials for populations whose primary language is not English, as well as using "culturally specific terms." [42]

See policy and advocacy recommendations:

3. Invest in and promote inclusive inter- and transdisciplinary research

4. Engage with civil society organizations and advocates to improve data collection and evidence-based policymaking

5. Invest in and sustain public, open datasets

ENDNOTES

26 Internationally, few countries have gone through a thorough process to include gender identity questions in their census, notably Canada and the current process underway in Scotland.

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03

THE ROLE OF CITIZEN-GENERATED DATA

THE ROLE OF CITIZEN-GENERATED DATA

Advancing data equity for transgender communities requires a holistic approach to how individuals are perceived, seen, categorized, protected and excluded.

Current evidence-based policymaking practices are limited due to their lack of survey questions about, and consideration of, gender identity when collecting and analyzing data. This results in the total absence or misrepresentation of trans communities, leaving these communities and policymakers without proper official numbers and having to rely on citizen-generated data to tell their stories. Citizen-generated data often involves individual and community-based contributions to data and is important to ensure we "leave no one behind" (LNOB)[43] since "citizen contributions to data help fill critical data gaps for groups suffering from marginalization and increase the extent to which their experiences are reflected in statistics."[44]

The growing importance of citizen-generated data is reflected in its presence in multistakeholder, intergovernmental spaces, such as the United Nations (UN) World Data Forum, organized by the UN Statistics Division. Seen as a valuable tool to reach people and communities that are invisible to the statistics bureaus, citizen-generated data has been increasingly used to advance the Sustainable Development Goals (SDGs).[45] It is also part of recent declarations, such as the Hangzhou Declaration from 2023, which commits to "[e]xpand collaboration and coordination with more parts of the data ecosystem through the launch of a new programme on citizen-generated data to empower individuals and communities to contribute to data production, take control of their data and improve their lives."[46]

COMMUNITY ENGAGEMENT IN CITIZEN-GENERATED DATA

For decades, the memories and stories of transgender communities were collected by non-state organizations and people. Gender-diverse communities relied, for a long time, on oral histories and collaborative records to recover narratives that otherwise have left few material traces. Works on queer nightlife[47] and queer maps[48] feature experiences and information about these communities, in which authors will use personal accounts to reconstruct knowledge, timelines or other more conventional forms for organizing data, in what have been termed "technologies of memory."[49] Thus far, there have been few attempts to aggregate such data points into broader histories. At the same time, scholars and advocates have engaged in a massive, if uncoordinated, effort to pull information from ephemeral, pre-digital media forms into systematic databases.[50]

Citizen-generated data also allows different communities to define more expansive boundaries of what is considered valid data, bringing into the conversation qualitative approaches and social analysis. Within this approach, one should consider broader sociocultural frameworks that can impact data collection to address missing data and bias. From distrust in government agencies to fear of (online and offline) violence, disclosing gender identity to official data collection efforts is not always a straightforward process. Thus, qualitative information can become a helpful tool, in addition to statistical techniques, to connect the dots, figure out missing links, and build trust with communities.

When we let gender-diverse individuals tell their own stories, it becomes clear how the limitations and potentialities of data collection unfold. Combining statistical techniques with rigorous qualitative research (e.g., focus groups, in-depth interviews, and case studies) enhances chances to ask good and adequate questions that cover the various intricacies of gender identity. It also is an opportunity to build meaningful engagement in the process, discuss the relevance of the data, map the needs of communities, and even create mechanisms to disseminate findings.

BEST PRACTICES FOR SAFEGUARDING TRANS RIGHTS IN DATA ECOSYSTEMS

Another aspect to be considered is engagement with community-based and civil society organizations. To listen to the public and advocates, the government must consider following a meaningful multistakeholder approach[51] to SOGIE data collection, meaning individuals and organizations from different sectors – who are interested, impacted by or have a role in this process – are invited to the table. Certain groups can be inaccessible to government agencies, but reachable through other networks centred in providing care, support, and resources to gender-diverse people facing various disparities. Working together, across disciplines and practices, with a willingness to learn and collaborate is key.

There are several groups, organizations, and scholars dedicated to making transgender individuals visible[52] – in fact, data on most 2SLGBTQIA+ populations "are captured by surveys [...] largely conducted by academic institutions and universities, think tanks, nonprofits, and advocacy organizations."[53] Moving forward, the best practices and guidelines carefully designed (and thoroughly debated) by these organizations should be incorporated, in different stages of the data lifecycle, to establish a positive agenda that advances data equity for 2SLGBTQIA+ communities. These include, but are not limited to

(1) Transgender people being meaningfully involved in question development, testing, and the evaluation processes.

(2) Carefully considering the scope and sample size of surveys to avoid re-identification, especially when collecting data of smaller groups.

(3) Following guidance of Institutional Research Boards or equivalent if research is conducted in partnership with universities or companies and have similar guidance for cooperation with government.

(4) Prioritizing safety, confidentiality and privacy, even if the country or jurisdiction where the data collection takes place does not have comprehensive data protection legislation.

(5) Paying attention to terms of services and policies of platforms used to collect information on transgender people and choosing them carefully.

(6) Providing translation to the communities' language(s), using culturally specific terms, and inquiring about other accommodations needed.

(7) Adopting trauma-informed survey research practices if necessary.

The invisibility faced by so many members of gender-diverse groups in the last several decades is exacerbated by other social and cultural identities, making certain disparities only visible to those engaged in assessing the situation, understanding shortcomings, and learning with those affected.[54]

Safeguarding human rights while making gender-diverse communities visible is extremely necessary. The gaps between trans and digital rights advocacy need to be addressed with shared experiences, tools and tactics. For this reason, learning from and with civil society and community-based organizations and responsible research efforts (in academia and beyond) can help the development of a data ecosystem that is critically assessed and data-informed policy that is more aligned with the needs of individuals. In the context of digital rights advocacy, there is a significant demand to consider a multistakeholder approach that includes government, civil society, academia, and industry representatives in these processes – whose results are reflected in the organization of sessions and coalitions at the Internet Governance Forum (IGF),[55] for instance. Inviting people and organizations working on topics that are significant for this agenda, can bring in much needed perspectives and expertise on topics such as digital rights, data justice, racial equity, and Indigenous sovereignty, among others.

At the forefront of this process is designing mechanisms for transparency and accountability, as well as actual participation, committing to receive inputs in multiple platforms and venues and engage meaningfully with the people involved while being prepared to admit, learn from and correct mistakes.

See policy and advocacy recommendations:

1. Create inclusive multistakeholder spaces for collaboration and TDR discussions
2. Develop and maintain open platforms for knowledge sharing
3. Invest in and promote inclusive inter- and transdisciplinary research
4. Engage with civil society organizations and advocates to improve data collection and evidence-based policymaking
5. Invest in and sustain public, open datasets

ENDNOTES

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04

THE INTERSECTION OF TRANS AND DIGITAL RIGHTS

THE INTERSECTION OF TRANS AND DIGITAL RIGHTS

Currently, few topics are more polarizing than gender identity and expression[56], precipitated by a long history of anti-trans rhetoric that invalidated trans identities, portrayed trans people as "dangerous" or "threatening", and used dehumanizing language to justify discrimination and violence. Anti-2SLGBTQIA+ rhetoric and polarization is not new; instead, it has been capitalized on and systematically built for decades. In recent election campaigns in countries like the US, Brazil and Canada, candidates used anti-trans discourse as a platform for polarization.[57] Moreover, the rise of a far-right conservative agenda will make the next couple of years particularly challenging for gender-diverse individuals. Part of a global agenda[58] and interconnected to other systemic issues[59] the rampant attacks on transgender rights flourish in narratives of "us versus them," misinformation[60] and the lack of proper human rights-based visibility for gender-diverse communities. The growing influx of bills targeting 2SLGBTQIA+ groups, many of them proposing restrictions on education systems, healthcare, free speech, and civil rights, do not preclude advocacy to improve self-determination and everyday life for these communities. The coordinated effort to restrict rights through barriers to accurate IDs, healthcare restrictions, interference with freedom of expression, public accommodation bans, and limiting educators and students' freedom to discuss gender in governments around the world is worrisome. The very existence of these bills, even when defeated, along with current discourse that dehumanizes trans people – works as a mobilization strategy for a political extremist agenda, which therefore causes harm and anxiety in targeted communities.

The lack of comprehensive data on gender identity is not unique, as it is part of a broader situation that encompasses other groups, such as women not being properly represented in datasets.[61] These data gaps span an array of categories, from the number of individuals identifying as transgender to the many instances of gender-based violence that go unreported. Many instances of gender-based violence go unreported, online and offline, complicating efforts to measure and address the issue effectively. Data feminism scholarship[62] contributes to discussions of visibility and classification systems, emphasizing the need for systematic qualitative and quantitative data collection.

As having data can be a significant "defense against femicide,"[63] indicators on violence against transgender individuals exist but are limited. For instance, the Trans Murder Monitoring (TMM) project monitors, collects, and analyzes reports of homicides of trans and gender-diverse people worldwide. Violence data is especially concerning in regions like Latin America, where countries such as Brazil report alarmingly high numbers of murders,[64] and particularly worrisome for Black trans identities, given the historical, precarious and systematic marginalization they face.[65] These numbers may be influenced by the current economic, political, and social contexts, but the overall prejudice, lack of transparency and the underreporting of cases further obscure the true extent of the gender-based violence. Additionally, the trans community does not want and should not be defined only by violence data.

Despite increasing online gender-based violence (OGBV), digital spaces and tools serve as crucial platforms for knowledge sharing and care. This feeds into the ambivalences of being online as a trans person, later explored in more detail. On the one hand, platforms such as social media networks serve as community-building and become vital support networks, enabling individuals to share experiences, access resources, and foster a sense of belonging. The internet provides a space for community and belonging for many queer and trans people as "queer youth are much more likely than other groups to have important online friends, often first come out as queer online, engage in activism and civic participation online at high rates, and search for sensitive (e.g., sexuality- and medical related) information online at much higher rates than non-queer youth."[66] In some instances, digital technologies may be the only place individuals find affirming community and information.[67]

On the other hand, these platforms can also facilitate harassment, abuse, and violence, becoming arenas for OGBV, particularly affecting transgender communities and women. Resources published by the Association for Progressive Communications that help advance the consideration of gender-diverse communities in this conversation describe OGBV including but not limited to: "infringement of privacy; surveillance and monitoring; damaging reputation and/or credibility; harassment (which may be accompanied by offline harassment); direct threats and/or violence; and targeted attacks to communities."[68] For transgender individuals, OGBV also manifests as the "dismissal of gender identity; sharing of images without permission; hateful comments; and threats of violence and death."[69] For instance, in 2022 an anti-trans organization used Google Maps to expose clinics that offered access to gender affirming healthcare; not to increase access, but to target people seeking care and those providing such care.[70] These online risks are widely experienced and feared by the trans community in ways that limit their safety, speech, activism, and community. In a study about being gender nonconforming and being online, a majority of the transgender, non-binary, and genderqueer people interviewed felt that being visible in their identity online (such as advocating for 2SLGBTQIA+ issues, activism, posting about their identity etc.) would increase their risk of facing doxxing.[71]

In a datafied society in which telehealth, chatbots and data brokers[72] have become more prominent, data justice matters need to be part of digital rights concerns. Online spaces also offer information on gender transition and care – and people searching for that information or requesting help via telehealth platforms or social media can be weaponized in the anti-trans agenda and surveillance practices. Similar to issues of monitoring access to reproductive rights when these are prohibited or criminalized,[73] seeking care can be dangerous for patients and practitioners[74] depending on surveillance apparatuses[75] in the country, province or state, which requires special attention to privacy and data protection.[76]

Data collection and gender surveillance puts the access to services by transgender people at risk. In the US, state legislators are increasingly reaching "beyond their states' jurisdictional bounds to punish residents for seeking care" including gender identity and reproductive rights.[77] The creating, collecting and sharing of personal data can work to make monitoring daily activities easier.[78] For instance, "License plate data, Uber and Lyft data, and even bikeshare data can be used to reveal that someone traveled to a reproductive or gender-affirming healthcare clinic,"[79] or 2SLGBTQIA+ community spaces.

In response to efforts to identify and prevent access to gender affirming and abortion health care in various states, California became a "data sanctuary," passing S.B. 107 which "limits how California entities disclose personal data to out-of-state entities that would use it to investigate and punish trans health care."[80] Specifically, the bill requires that "providers also cannot release medical information about a person allowing a child to receive gender-affirming care, in response to an out-of-state criminal or civil action against such a person. Legislation making states "data sanctuaries" (otherwise referred to as data "shield" or "refuge" laws) are necessary in the current state so states can preserve access not only to medical care that is being criminalized in other states but also to transition, express gender in various forms and build community. The Movement Advancement Project (MAP) identifies that 14 states as well as the District of Columbia have these "shield" laws in place to protect access to and data about medical care[81] but we should consider expanding the concept of data sanctuaries beyond clinical contexts. And while "data sanctuaries" are important responses to the politically coordinated anti-trans agenda, there is an urgent need to go beyond and create more broad frameworks. These sanctuaries provide access to necessary care to some, but many transgender people are still left with few options, depending on class and income, disability and other factors that restrict their movement to states with more protections in places.

This duality underscores the need for robust measures to protect vulnerable populations while preserving the positive aspects of online engagement and telehealth. Addressing this ambivalence requires a nuanced approach that balances the promotion of safe, inclusive online environments with the enforcement of policies to combat OGBV effectively and a strong digital rights framework. According to creators of technologies designed to address issues trans people face, particularly in terms of access to information about transition and trans inclusive health care,[82] these technologies are necessary to "combat the precarity trans communities face in finding trans health information both online and in person."[83]

In this context, the intersection of trans rights and digital rights must be better understood, researched and advocated for.

Below, Table 1 offers an exploratory cross-national comparison with regard to the existence of data protection and privacy legislation and the codification of trans rights, such as self-determination, access to GAC, data collection, education and freedom of expression.

The table contains 21 countries and eight categories for each country:

(1) The availability of gender identity laws.

(2) The existence of mechanisms for gender self-determination.

(3) Whether non-binary people are recognized by the government or not.

(4) If the census of the country includes questions about gender identity.

(5) Access or barriers to gender affirming care.

(6) If the country has data privacy and protection laws in place.

(7) The existence of specific legislation related to privacy and health.

(8) Overall position of the government about gender being discussed and taught in schools and universities.

The significance of this comparison lies not only in its effort to bring laws, regulations and practices affecting two areas (trans and digital rights) together but also in the idea that advancing trans rights is deeply connected to improving privacy and data protection for all populations. We see, for example, that countries with more robust gender identity and gender self-determination mechanisms have, at the same time, regulatory frameworks in place for data protection. However, the opposite is not necessarily true: countries can have data protection laws in place but criminalize GAC and suppress any form of gender self-determination.

There are regional trends that might be worth further exploring, such as Latin America's recent changes in laws related to gender identity, often happening as privacy and data protection laws are updated, drafted or come into force. The fragmentation caused by the lack of a federal-level data protection framework in some countries leave the decisions to states or provinces, then having places with more guardrails and protections for transgender individuals and their data, while others are not safe at all.

We also found that the medicalization of gender-diverse communities is still a barrier to access proper healthcare and GAC, accurate IDs, and exercise gender self-determination. All these topics deserve more attention from the global community of scholars and advocates as interconnected challenges rather than isolated regulatory and policy battles.

The findings are limited to the research team's language proficiency, and we understand that more nuanced and detailed information might not be available in the languages we speak. We hope this table offers preliminary insights and can collectively be improved and expanded over time.

TABLE 1 – EXPLORATORY COMPARISON OF COUNTRIES REGARDING GENDER IDENTITY, ACCESS TO CARE AND DIGITAL RIGHTS

COUNTRY	Gender identity laws [Y/N]	Gender self-determination [Y/N/depends]	Non-binary individuals are recognized by government [Y/N/depends]	The census asks about gender identity [Y/N]	Gender-affirming care [available, needs surgery/medical intervention/illegal/criminalized]	Privacy and data protection laws	Specific privacy/data protection in health	Gender can be discussed/taught at schools and universities
ARGENTINA	Y - Identidad de Género - Ley 26.743	Y	Y	Y	Available	Y	Y	Depends (Buenos Aires sued for banning gender-neutral language in schools)
AUSTRALIA	Y - Australian Government Guidelines on the Recognition of Sex and Gender	Y	Y	N	Available (surgery needed in some states to change birth certificate gender markers)	Y - The Privacy Act 1988 (Privacy Act)	Y	Y
BRAZIL	Y	Y	N (since 2020 non-binary people have been getting court authorizations to register their sex as "unspecified", "non-identified" or "non-binary" in the civil registry)	N – Being considered for the 2025 census	Available (needs surgery and medical intervention)	Y - Lei Geral de Proteção de Dados (or LGPD)	Y	Y
CANADA	Y - Canadian Human Rights Act	Y	Y	Y	Depends on province/territory and rural/urban	Y - federal, provincial, and territorial statutes	Y	Depends on province/territory
CHILE	Y - Ley de Identidad de Género	Y	Y	Y	Y	Y - Personal Data Protection Law	Y - Law 20,584	Y
CHINA	N	N – only name	N	N	Available	Y - Personal Information Protection Law	Y	N
COLOMBIA	Y	Y	Y	N	Available	Y - Personal Data Protection Law	Y	Y
ECUADOR	Y - Ley Orgánica de Gestión de la Identidad y Datos Civiles	Y	N	Y	Y	Y	Y	Y
ENGLAND	Y	Y	N	Y	Available	Y - Data Protection Act 2018	Y	Y
FRANCE	Y - article 225-1 of the French Penal Code	Y (with court permission)	N	N - only asks about sexuality	Available	Y - French Data Protection Act (Loi Informatique et Libertés) and the European General Data Protection Regulation	Y - GDPR	N
INDIA	Y	Depends	Depends	Y - M/F/other	Available (needs surgery)	Y - Digital Personal Data Protection Act of 2023	Y - Health Data Management Policy	N
JAPAN	Y	Depends	Y	N	Available	Y - Act on the Protection of Personal Information Act of 2003 (APPI)	Y	N
LEBANON	N	N	N	N	Illegal	Y - Law 81 on Electronic Transaction and Personal Data	Y - Article 91 of Law 81	N
NIGERIA	N	N	N	N	Criminalized	Y - The Data Protection Act	Y - National Health Act 2014	N

PORTUGAL	Y	Y	N	N	Available	Y - Portuguese Data Protection Law	Y	?
ROMANIA	Y	Depends (requires GAC)	N	N	Available (surgery needed to change gender)	Y - Law No. 190/2018 Implementing the General Data Protection Regulation (Regulation (EU) 2016/679)	Y - Law 363/2018	N
SPAIN	Y - Ley Trans	Depends (different requirements depending on age)	N – Limited exceptions	Y	Available	Y - General Data Protection Regulation	Y - GDPR	Y
SOUTH AFRICA	Y - Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000	Y - Alteration of Sex Description and Sex Status Act 49 of 2003	N	N	Available	Y - Protection of Personal Information Act, 2013 (Act 4 of 2013)	Y - POPIA	N
THAILAND	Y - Gender Equality Act	N	N	N	Available	Y - Personal Data Protection Act (PDPA)	Y - National Health Act	N
TURKEY	N	Depends (requires GAC)	N	N	Available (must be 18 years old)	Y - Personal Data Protection Law	Y - PDPL	N
UAE	N	N	N	N	Available*	Y - UAE Data Protection Law	Y - UAE Health Data Law	N
USA	Y - it depends on the state	Y - it depends on the state	Y at the federal level (e. G. passports), but it depends on the state for IDs**	Y - it depends on the state	Available	Y - US Privacy Act of 1974; No federal data protection regulation	Y - HIPAA	It depends on the state as of 2024

Elaborated by the authors based on available laws, norms, regulatory frameworks and publicly available information in English, French, Spanish and Portuguese.

* Medical Liability Law – GAC permitted if part of a treatment for gender dysphoria.

** By the time this report was published, the Trump administration signed an executive order that included -- among other issues -- a directive to the Departments of State and Homeland Security “to require that government-issued identification documents, including passports, visas, and Global Entry cards” reflect people’s sex “at conception.”

See policy and advocacy recommendations:

1. Create inclusive multistakeholder spaces for collaboration and TDR discussions

2. Develop and maintain open platforms for knowledge sharing

3. Invest in and promote inclusive inter- and transdisciplinary research

4. Engage with civil society organizations and advocates to improve data collection and evidence-based policymaking

5. Invest in and sustain public, open datasets

7. Prioritize responsible, ethical and trans-friendly care

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05

EMERGING ISSUES: BIG DATA AND ARTIFICIAL INTELLIGENCE

EMERGING ISSUES: BIG DATA AND ARTIFICIAL INTELLIGENCE

Many artificial intelligence (AI) systems depend on collecting and analyzing mass amounts of data, particularly on intimate and private aspects of individuals' lives, identities, and social relations, often processing this data "for purposes that were not fully determined at the time of collection,"[84] to make assumptions and predictions about individuals beyond their control and without their knowledge. With "more than 700 artificial intelligence use cases among federal agencies"[85] in the US, current efforts to open government data for training AI[86], and widespread development and use in the private sector, the impact of AI models on various historically marginalized communities is being consistently documented but some aspects remain barely known. The increased use of AI poses risks from surveillance and privacy violations to inaccuracies in gender identity representation, affecting trans-identifying individuals in unique ways. As institutions increasingly rely on "algorithmic methods to identify and classify people,"[87] it is crucial to understand how these classifications and the data required for these systems to function work concerning gender identities and expressions beyond male/female classifications.

ARTIFICIAL INTELLIGENCE, BIG DATA ANALYTICS, AND KNOWLEDGE PRODUCTION

Often "the very premise of 'big data' privileges the perspectives and interests of (pre)dominant social groups and further marginalizes the viability and voices of other groups."[88] For instance, training data for AI algorithms almost necessarily is from "a time (even in the very recent past) when gender nonconforming people were barely recognized in the public consciousness"[89]; meaning models using this data cannot represent nor empower various trans, non-binary, and gender-diverse identities.

AI models rely on "massive amounts of data to find patterns and make predictions." [90] This form of knowledge production deprioritizes the experiences and issues faced by marginalized groups, including gender-diverse people, as they make up a significant but not large portion of the global population. The knowledge produced through analysis of mass amounts of data is increasingly considered "a higher form of intelligence"[91] such that other forms of evidence that marginalized groups have historically relied on to advocate for and protect themselves is undervalued. This process facilitates the prioritization of large datasets and the use of algorithms to identify patterns, reinforcing the imposition of a gender binary. Certain critiques of big data explore how the distinction between big data, so-called "small data", and other forms of knowledge, impact queer and transgender people. The argument is that "we must restructure the politics of scale in the big–small data divide to address the experiences and places of marginalized groups in these data" as "the stories and the data of the marginalized remain "small data" in their number, respect, and meaning."[92]

The reliance on big data and data-driven evidence as the only viable tool for pursuing truth and understanding has been institutionalized in ways that are often questionable. For example, in the court system "anecdotal accounts or ethnographic interviews" are overwhelmingly seen as less persuasive than "hard data" meaning interviews or qualitative information "detailing police harassment and profiling"[93] for instance, may be structurally undervalued.

BIOMETRIC TECHNOLOGIES, AUTOMATIC GENDER RECOGNITION AND DIGITAL IDs

The use of biometric data (i.e. faces, fingerprints, and iris scans) to categorize and identify individuals is increasingly common worldwide, creating another complex layer of potential and actual harms to gender-diverse communities. Automatic gender recognition (AGR) systems, which assume an individual's gender based on biometric markers often to then verify identity, are almost ubiquitous when using facial recognition technology (FRT) as, "anywhere you see facial recognition, AGR might well be present."[94] Concerningly, in determining "an individual's gender based on various biometric features or behavioral patterns,"[95] AGR makes "an exclusively binary determination: female or male."[96] Facial recognition technology, like AGR, poses risks related to misidentification and discrimination against people who do not fit narrow and stereotypical understanding of binary gender.

Many studies, especially those led by Black women, questioned the accuracy of such AI systems for gender and race, finding that "darker-skinned females are the most misclassified group (with error rates of up to 34.7%). In contrast, the maximum error rate for lighter-skinned males is 0.8%."[97] These research findings led to improvements in industry and paved the way for more critical research on AI systems in academia.[98] Although improvements have been made in these technologies, computational solutions like debiasing techniques could actually worsen gender bias.[99] Consequently, more recent arguments have asked us to address harm instead of bias, since debiasing alone would not guarantee fairness, equality, and non-discrimination.[100]

Recently, various state actors have begun to implement digital IDs, which often involves the storage of sensitive information including biometric and locational data.[101] This technology is gaining traction as "at least five million Americans have signed up for mobile driver's licenses (mDLs) in the 11 states that have interoperable programs fully implemented"[102] and many other states are launching pilot programs to develop their own systems. While not mandatory in the US, digital IDs are encouraged as convenient and marketed as a "faster option for security checks and flight boarding."[103] Digital IDs are becoming commonplace across the EU, "where according to the European Commission, 'At least 80% of citizens should be able to use a digital ID solution to access key public services by 2030'"[104] and are in some cases mandatory, such as Aadhaar in India.[105]

What is even more alarming is that these technologies are widespread across both the private and public sectors. The private sector leans toward wider adoption of digital IDs. For instance, Uber's Real Time ID Check policy, which used facial recognition technology to compare a selfie a user takes with their photo on file, suspended the accounts of multiple trans users when implemented.[106] Concerns about biometrics and digital IDs also involve humanitarian aid and migration,[107] and access to social services,[108] which cause problems at intergovernmental levels when they are irresponsibly designed and adopted.[109] AGR and biometric identification systems often deny gender-diverse communities equal rights and access to services. Specifically, "misrecognition operates as a barrier to an individual exercising certain rights-to travel, to hold an occupation, to expect privacy, or to speak and express oneself freely. Taken in total, these forms of misrecognition also can amount to forms of erasure, removing the potential for individuals to even claim those rights altogether."[110] This misidentification singles out and makes transgender people precariously visible. The potential threats increase when navigating hostile regulatory and social contexts, resulting in uncomfortable and even dangerous situations, as well as other rights violations, such as misgendering, and denying access to public and private services altogether.

For governmental examples, the US Government Accountability Office (GAO) 2024 report on biometric identification technologies details numerous instances where biometric information is processed by AI algorithms to verify identity: recently "24 of 53 state workforce agencies hired a combined total of 10 identity verification service contractors that used facial recognition technology"; during Covid-19, "half of all states incorporated biometric identification technologies into the application process for unemployment insurance, often using private vendors"; and that Customs and Border Protection (CBP) has switched to using a mobile app which requires "submitting a photograph," which is matched across "identification documents and against a gallery of images to vet any law enforcement and national security concerns" to be able to schedule an appointment."[111] The report also broadly identifies that these technologies are used in "domestic law enforcement; border security, including passenger, screening at ports of entry; public education; access to public benefits, such as unemployment; health care; and commercial uses." and so on.[112] For context on the scale of this process, not including the states or other federal agencies, the US Department of Homeland Security's Automated Biometric Identification System "currently holds approximately 300 million unique identities and processes more than 400,000 biometric transactions per day."[113]

The very use of AGR and identity verification systems that rely on external physical characteristics is incompatible with respecting and empowering transgender individuals. Specifically, AGR "removes your opportunity to self-identify, and instead infers your gender from data collected about you"; using "information such as your legal name, whether or not you wear makeup, or the shape of your jawline or cheekbones" all of which treats gender identity as something that can be determined externally leading to higher risk of disempowerment, misrecognition, and misgendering.[114] The perspective of technology relaying the idea that gender is something assigned at birth is problematic, "[y]et to be trans—to be of a gender that runs contrarywise to that which society assumed of you—means to stand as testament to the idea that it is self-knowledge, not external assignation, that has primacy in defining gender. Put simply, a trans-inclusive system for non-consensually defining someone's gender is a contradiction in terms."[115]

GENDER IN COMMERCIAL PROFILING AND TARGETING

Companies also often make assumptions about gender to target advertisements.[116] For instance, Google guessed "users' age, gender, marital status, income bracket, and personal interests"[117] based on the mass amounts of data it collects on search habits and browsing data. In 2021, Spotify was granted a patent for technology with the goal of detecting, among other things, "emotional state, gender, age, or accent"[118] to recommend music. These practices are especially worrisome as many users are unaware that their internet use is being tracked to make assumptions about them and, in turn, to build targeted profiles to algorithmically prioritize content and advertisements.

Even early instances of this individualized and targeted advertising used technology to make assumptions about gender; for instance, in 2012, a billboard in London used "facial recognition technology to send gender-specific messages."[119] This advertising strategy has only expanded as in 2020, the CEO of a marketing software company explained in an interview by NPR that it is possible to tell which cellphones are near billboards in Times Square by purchasing location data from cellphone carriers and syncing that data with data acquired about who owns those cellphones. These technologies allow companies to know (or at least assume) categories, such as age, race, gender, credit scores, and lifestyle preferences.[120] Attempts to use facial recognition technology in public spaces to erroneously track emotions,[121] predict behaviours and provide targeted ads is still an issue globally. In 2021, the Brazilian Institute for Consumer Protection (IDEC) filed and won a class action suit in the Civil Court, which held that the use of facial recognition technology on a subway line operated by ViaQuatro was "an infringement of the right to privacy of one's image and to the freedom of information.[122] ViaQuatro deployed interactive doors at stations, planning to "use them to display personalized advertisements to riders, gauging demographics information and emotional reaction through cameras equipped with facial recognition technology."[123] IDEC approached the Court seeking damages and enforced an order prohibiting the use of the equipment.

Technologies like FRT and AGR often work within gender binary classifications,[124] resulting in reductive examples that miss the mark: "a trans man who sees a billboard flicker to advertise dresses to him as he approaches is, even if he likes dresses, unlikely to feel particularly good about it."[125] Even seemingly innocuous uses of these technologies, such as a campaign that gives "discounted subway tickets to women in Berlin to celebrate Equal Pay Day that tried to identify women based on facial scans"[126] still perpetuates the harms of misgendering and misrepresenting transgender individuals, accentuating a feeling that is opposite to belonging.

Overall, instead of asking if FRT and AGR can be trans-inclusive we should ask if these technologies "can be made to work in a technically trans-inclusive way [...] that is meaningful."[127] Some recommendations suggest the need to either make these systems more trans-inclusive or avoid implementing AGR altogether,[128] especially if we consider that "such technologies only become possible—even imaginable—because of the worldview and practices espoused by colonial projects of gendered and racialized classification."[129]

See policy and advocacy recommendations:

1. Create inclusive multistakeholder spaces for collaboration and TDR discussions

2. Develop and maintain open platforms for knowledge sharing

3. Invest in and promote inclusive inter- and transdisciplinary research

4. Engage with civil society organizations and advocates to improve data collection and evidence-based policymaking

5. Invest in and sustain public, open datasets

6. Design trans-friendly AI impact assessments and trans-inclusive adoption tools

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06

REIMAGINING A TRANS DIGITAL RIGHTS FRAMEWORK

REIMAGINING A TRANS DIGITAL RIGHTS FRAMEWORK

Digital rights mean, simply put, human rights in the digital environment. Protecting the digital rights of gender-diverse communities requires a nuanced understanding of digital technologies as being able to provide a space for necessary information sharing, community building, and activism. Protecting digital rights also requires an encouraging and empowering space to counter harm and oppression if insufficient human rights safeguards exist.

Public policies that work to advance digital rights must ensure that information and communication technologies (ICTs), such as online platforms, avoid instrumentalization of their technologies to target and oppress transgender individuals. Rarely do digital rights frameworks reflect on unique needs of gender-diverse communities. Here, we present a first attempt at better drawing principles, guidelines,responses and actions that can be relevant to other communities dealing with the ambivalences, possibilities and risks of being visible and online: a Trans Digital Rights (TDR) Framework.

REIMAGINING THE RIGHT TO BE FORGOTTEN IN RELATION TO GENDER TRANSITION

A necessary step towards achieving trans digital rights is reimagining mechanisms that allow to exercise the right to be forgotten, through which any person may decide to exclude, deindex or delete their outdated, useless or decontextualized information from online and offline databases. The right to be forgotten applied to trans identity information and gender transition can help transgender individuals to improve feelings of belonging. It also can help protect transgender individuals from human rights violations and the harms of people accessing data collected on them without their knowledge, consent, or control.[130]

INCORPORATING A PURPOSE LIMITATION PRINCIPLE

Another important consideration is purpose limitation, a principle included in many data privacy frameworks including the California Consumer Privacy Act and the EU's General Data Protection Regulation. Purpose limitation requires that, when collecting information, companies only collect data that is necessary for the service they are providing, they are clear about how that data will be used, and that that data cannot be used for any other purpose.[131] Requiring purpose limitation for data collection is especially necessary for data that companies hold on gender identity, as reusing or selling such data beyond its initial collection purpose puts gender-diverse people at considerable risk.

ENABLING 2SLGBTQIA+ POSITIVE CONTENT MODERATION

YouTube, X/Twitter, and various other social media sites have censored or restricted 2SLGBTQIA+ content "including videos of a same-sex couple reading their wedding vows, a transgender woman performing a makeup tutorial, and a video celebrating Pride."[132] At the same time, many of these platforms underregulate and overlook harmful, hateful and discriminatory content targeted at transgender people. This simultaneous over and under regulation "redraws the boundaries of digital citizenship-implicitly suggesting that [2S]LGBTQ[IA]+ populations are less deserving of the same protections enjoyed by others within the mainstream population."[133] Even when companies claim to prohibit such harmful content targeting 2SLGBTQIA+ people,[134] these policies lack enforcement.[135] Content moderation policies must be conscious of the ways both over censorship and under protection of online spaces limit the ability of gender-diverse people to use the internet – and social media specifically – restricting their access to often necessary information and community-building. Additionally, adding more user control over recommender systems can help avoid unwanted advertisements that could reinforce binary gender identities.

PROHIBITING DEADNAMING AND MISGENDERING IN ONLINE PLATFORMS

Companies and public institutions that offer digital services should include clauses that prohibit human rights abuses based on gender, sexuality and gender identity in their terms of service (ToS) and policies, which may reduce user vulnerability by making companies and institutions responsible for their users' well-being.[136] A few social media platforms already enforce these clauses, paving the way for other companies to follow suit. There also is a call and increased support to recognize targeted deadnaming and misgendering as hate speech.[137] Inviting civil society and community-based organizations working on the promotion of trans rights and digital rights into these conversations also is necessary, as the centering of corporations and maintenance of self-regulatory data governance systems often excludes transgender voices from the conversation.

ADDRESSING MIS/ DISINFORMATION AND POLARIZATION

As the anti-trans global discourse and actions that feed an extremist far-right agenda become more prominent, shedding light into the specific challenges that misinformation and polarization[138] create for transgender individuals is an important first step for public awareness. It equally is imperative to understand the weaponization of historical hatred of gender-diverse communities and work together with specialists, practitioners and organizations[139] that tackle the overwhelming volume of mis- and disinformation circulating in online platforms on a daily basis. From de-platforming extremist, transphobic content to preventing misinformation on gender identities, GAC and other aspects of trans lives, there are many opportunities to explore, design and enforce better practices.

BRINGING DIGITAL RIGHTS INTO TRANSGENDER-FOCUSED GOVERNMENTAL DATA COLLECTION

As with digital technologies, data collected by the federal government can bring both possible benefits and pose possible risks to trans people. On the one hand, increased visibility can lead to a better understanding of trans people and the issues they face, and on the other, more data raises concerns for privacy and the possibility of being targeted. Because of this double-edged sword, accessing the benefits of data inclusion requires protecting data privacy. While the process is more straightforward where regulatory frameworks for privacy and data protection are in place, the same cannot be said for jurisdictions still lacking proper regulation in these areas. That does not mean that governments should avoid engaging in public consultations and start to responsibly collect SOGIE data. These are processes that should unfold with oversight and accountability, while pushing for better privacy protection that can improve trans rights.

CONSIDERING GENDER IDENTITY DATA AS SENSITIVE DATA

Under many data protection frameworks, sensitive data receives heightened protections, often including requiring consent to collect sensitive data, mandatory Data Protection Impact Assessment (DPIA),[140] and limits to how that data can be used.[141] This protection is a necessary step in preventing harms to gender-diverse people.

PREVENTING DEANONYMIZATION

Federal agencies, companies and other non-state actors must adopt measures that prevent data de-anonymization relating to respondents' gender identities in data collection processes – from research projects to census and surveys. Research shows that it is possible to de-anonymize and identify individuals who have gone through gender transition using only data available in public databases.[142]

RETHINKING DATA BREACHES FROM THE PERSPECTIVE OF ATTACKS ON TRANS RIGHTS

A personal data breach means a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to, personal data can have profound and disproportionate impacts on transgender individuals and communities, often exposing highly sensitive personal information. For example, gender assigned at birth, gender markers, medical history or legal name changes. Data breaches can lead to significant privacy violations, outing individuals without their consent, and increasing their vulnerability to discrimination, harassment, and targeted violence. The loss of control over such deeply personal information can exacerbate existing challenges transgender individuals face in healthcare, employment, and housing as well as erode trust in institutions meant to safeguard their rights. Moreover, the emotional and psychological toll of such breaches can compound the systemic marginalization already experienced by this community. Therefore, we must rethink data breaches to incorporate the dangers posed by the increasing attacks on trans rights.

INFORMING ON INTENDED USES OF DATA

It is necessary to make it clear to survey respondents about the intended uses of the collected data, as well as the conditions for sharing it with other agencies. Individuals with gender non-conforming identities may feel comfortable providing this type of data under certain circumstances, but they certainly would hesitate if they knew their data would be available to other federal or state agencies that could put them at risk.

FACILITATING THE REMOVAL AND AMENDMENT OF GENDER IDENTITY INFORMATION IN IDS

Policymakers also should ensure access for trans individuals to correct name and gender information for both physical and digital IDs as well as any other data the government maintains. There is much work to be done as many transgender adults do not have a form of identification that displays their correct name or gender.[143] Research has shown that the lack of gender affirming identity documents worsens mental health[144] and can lead to harassment and discrimination.[145] However, given the proliferation of ID systems to access all sorts of services, it is important to be mindful of the shortcomings of ID data collection for gender-diverse communities.[146]Additionally, we should consider the removal of gender information altogether from IDs.

INVOLVING ADVOCATES, CIVIL SOCIETY AND COMMUNITY-BASED ORGANIZATIONS

Inviting advocates, civil society and community-based organizations working on the promotion of digital rights to join the conversation about 2SLGBTQIA+ data equity – and vices-versa – could generate a productive exchange on how to move forward collaboratively. Local, regional and transnational perspectives on safeguarding human rights in a data-centric world can shed light on disparities or criteria to consider when reflecting on policy priorities from a public interest approach. Moreover, it is worth encouraging and pursuing a culture of inclusion among civil servants in charge of data collection, data use, and data sharing. Investment in capacity building of gender-diverse communities can help to embrace "diversity and inclusion as a foundational principle" and develop "comprehensive education programs on the needs and rights of the 2SLGBTQIA+ community" via partnering with or subcontracting 2SLGBTQIA+ communities to develop trust. [147] Learning from data stewardship efforts also can be useful when determining promising practices for the collection of data on gender identity and expression. [148] Lastly, developing policy recommendations and guidelines for data collection alongside gender-diverse communities and advocates for their rights in an inclusive multistakeholder setting is crucial to consolidate a robust framework.

TRANS DIGITAL RIGHTS FRAMEWORK: A SUMMARY

PRINCIPLES AND GUIDELINES	ACTIONS	IMPLEMENTATION LEADERS
Reimagining the right to be forgotten in relation to gender transition	Reimagine mechanisms that allow to exercise the right to be forgotten applied to trans identity information and gender transition, allowing people to exclude, deindex or delete their outdated, useless or decontextualized information from online and offline databases.	Government Companies Academia Data protection authorities Policymakers Legislators
Incorporating a purpose limitation principle	Incorporate a requirement for companies collecting information on gender identity and expression to only collect data that is necessary for the service they are providing while being clear about how that data will be used and limiting its use for other purposes.	Government Companies Civil society and community-based organizations Data protection authorities Legislators
Enabling 2SLGBTQIA+ positive content moderation	Enable 2SLGBTQIA+ positive content moderation policies that are conscious of the ways both over censorship and under protection of online spaces limit the ability of gender-diverse people to use the internet – and social media specifically. Additionally, adding more user control over recommender systems can help avoid unwanted advertisements that could reinforce binary gender identities.	Government Companies Civil society and community-based organizations Policymakers Legislators
Prohibiting deadnaming and misgendering in online platforms	Include clauses that prohibit human rights abuses based on gender, sexuality and gender identity in terms of service (ToS) and policies of digital platforms and recognize targeted deadnaming and misgendering as hate speech.	Government Companies Civil society and community-based organizations Policymakers Legislators
Addressing Mis/disinformation and polarization	Address specific challenges that misinformation and polarization create for transgender individuals is an important first step for public awareness, and it is equally important to understand the weaponization of historical hatred of gender-diverse communities and work together with specialists, to tackle these issues. From de-platforming extremist, transphobic content to preventing misinformation on gender identities, GAC and other aspects of trans lives, there are many opportunities to explore, design and enforce better practices.	Government Companies Academia Data protection authorities Policymakers Legislators News media Fact-checkers
Bringing digital rights into transgender-focused governmental data collection	Bring digital rights principles to data collection performed by the federal government to increase data inclusion, visibility and understanding of trans people and the issues they face while also protecting data privacy, even (and especially) in countries and jurisdictions lacking robust privacy regulatory frameworks.	Government Companies Academia Policymakers
Considering gender identity data as sensitive data	Consider gender identity data as sensitive data, as under many data protection frameworks, sensitive data receives heightened protections, often including requiring consent to collect sensitive data, mandatory Data Protection Impact Assessment (DPIA), and limits to how that data can be used. This protection is a necessary step in preventing harms to gender-diverse people.	Government Companies Academia Civil society and community-based organizations Data protection authorities Policymakers Legislators
Preventing deanonymization	Federal agencies, companies and other non-state actors must adopt measures that prevent data de-anonymization relating to respondents' gender identities in data collection processes – from research projects to census and surveys.	Government Companies Civil society and community-based organizations Data protection authorities Policymakers Legislators
Rethinking data breaches from the perspective of attacks on trans rights	As data breaches can lead to significant privacy violations, outing individuals without their consent, and increasing their vulnerability to discrimination, harassment, and targeted violence, we must rethink data breaches to incorporate the profound and disproportionate impacts on transgender individuals and communities, often exposing highly sensitive personal information.	Government Companies Civil society and community-based organizations Data protection authorities Policymakers Legislators
Informing on intended uses of data	Make it clear to survey respondents about the intended uses of the collected data, as well as the conditions for sharing it with other agencies. Individuals with gender non-conforming identities may feel comfortable providing this type of data under certain circumstances, but they certainly would hesitate if they knew their data would be available to other federal or state agencies that could put them at risk.	Government Companies Academia Civil society and community-based organizations
Facilitating the removal and amendment of gender identity information in IDs	Policymakers should ensure access for trans individuals to correct name and gender information for both physical and digital ID's as well as any other data the government maintains. Additionally, we need to consider the removal of gender information altogether from IDs.	Government Companies Policymakers Legislators
Involving advocates, civil society and community-based organizations	Invite advocates, civil society and community-based organizations working on the promotion of digital rights to join the conversation about 2SLGBTQIA+ data equity – and vices-versa – to generate a productive exchange on how to move forward collaboratively. Investment in capacity building of gender-diverse communities can help to embrace diversity and inclusion as a foundational principle. Learning from data stewardship efforts also can be useful when determining promising practices for the collection of data on gender identity and expression. Lastly, developing policy recommendations and guidelines for data collection alongside gender-diverse communities and advocates for their rights in an inclusive multistakeholder setting is crucial to consolidate a robust framework.	Government Companies Academia Civil society and community-based organizations Policymakers Legislators

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07

POLICY AND ADVOCACY RECOMMENDATIONS

POLICY AND ADVOCACY RECOMMENDATIONS

1. CREATE INCLUSIVE MULTISTAKEHOLDER SPACES FOR COLLABORATION AND TDR DISCUSSIONS

- » Facilitate the participation of transgender individuals in international spaces, especially multistakeholder and intergovernmental forums that are not currently inclusive for gender-diverse communities. The starting point should be allowing the use of preferred names, gender markers and no longer requesting gendered titles (e.g. Ms., Mr., Mrs.) for registration.
- » Create permanent multistakeholder efforts to strengthen the relationship between scholars, advocates, legislators and service providers working at the intersection of data justice, digital rights and transgender rights. One example is to bring digital rights, gender identity and trans rights discussions to existing fora and events debating technology policy.
- » Implement multiple collaboration formats across sectors, such as community-engaged research, participatory action research, official long-term partnership agreements between government and civil society organizations, steering committees that are inclusive of gender-diverse individuals, knowledge sharing platforms, and mutual milestones.
- » Co-design a clear roadmap and methodology on how to create and maintain a functional and inclusive multistakeholder network concerned about digital and trans rights.
- » Co-create roadmap and milestones to implement, improve and replicate principles featured in the TDR framework.

Enablers: government, civil society and community-based organizations, community organizers and advocates, industry, academia

2. DEVELOP AND MAINTAIN OPEN PLATFORMS FOR KNOWLEDGE SHARING

- » Develop and maintain open platforms for resource and knowledge sharing between different people and organizations that facilitate the exchange of literature, best practices, lessons learned, failures not to be repeated, campaigns, works in progress, and international perspectives.
- » Prioritize openness (open licensing, access, data, codes, educational resources and standards) in shared resources and materials to ensure equity and access to knowledge that is available to the Majority World.
- » Partner with public libraries, cultural centers, schools and universities to offer workshops and knowledge sessions free of charge and open to the public, both in-person and online to tackle mis/disinformation about gender-diverse people.
- » Design and promote campaigns to enhance awareness of the importance of digital rights for 2SLGBTQIA+ advocates, journalists and activists.

Enablers: government, civil society and community-based organizations, community organizers and advocates, academia

3. INVEST IN AND PROMOTE INCLUSIVE INTER- AND TRANSDISCIPLINARY RESEARCH

- » Increase long-term financially sustainable inter and transdisciplinary research funding across sectors independent of current political leadership and corporate interests.
- » Fund transgender researchers to explore and expand the topics presented in this report and emerging challenges in digital rights.

- Meaningfully involve transgender people in projects, especially in question development, testing, and the evaluation processes.
- Promote and fund (bi)annual conferences, symposiums and other opportunities to showcase research findings, research-action projects, and resources for evidence-based policymaking.
- Foster interdisciplinary and transdisciplinary support for grant applications.
- Set guidelines for equity and inclusion of gender-diverse communities that projects should follow to receive funding.
- Follow guidance of Institutional Research Boards or equivalent if research is conducted in partnership with universities or companies and have similar guidance for cooperation with government whenever collecting SOGIE data.
- Develop and fund projects that have an inclusive digital rights approach to SOGIE data collection, especially:
  - Carefully considering the scope and sample size of surveys to avoid re-identification, especially when collecting data of smaller groups.
  - Prioritizing safety, confidentiality and privacy, even if the country or jurisdiction where the data collection takes place does not have comprehensive data protection legislation.
  - Paying attention to terms of services and policies of platforms used to collect information on transgender people and choosing them carefully.
  - Providing translation to the communities' language(s), using culturally specific terms, and inquiring about other accommodations needed.
  - Adopting trauma-informed survey research practices if necessary.
- Fund programs to facilitate regular exchange on evidence-driven and science-informed initiatives between experts, advocates, and policymakers, encouraging openness about successes and limitations.

Enablers: government, philanthropic funders, civil society and community-based organizations, community organizers and advocates, industry, academia

4. ENGAGE WITH CIVIL SOCIETY ORGANIZATIONS AND ADVOCATES TO IMPROVE DATA COLLECTION AND EVIDENCE-BASED POLICYMAKING

- Participate in global conversations and forums advocating for the recognition of citizen-generated data as valid data to inform decision- and policymaking, adapting guidelines to local contexts.
- Adopt an expansive definition of data and evidence when developing, implementing and evaluating policies for gender-diverse communities.
- Prioritize meaningful engagement between data collectors and participants based on non-extractivist approaches and expansive views on valid data. Whenever possible, data collectors should compensate community organizers and organizations for the time and expertise that will help shape the questions.
- Work with local community-based organizations and advocates to build trust through the agreement if gender data should be collected in the first place, mutual understanding of categories being used and clear definition of mechanisms in place to safeguard privacy.
- When sensitive gender identity and expression data collection is being planned, establish regular communication channels and listen to civil society, community-based and non-profit organizations through workshops, public hearings, public consultations, studies, and online engagement.
- Design survey questions and sets of responses that respect the complexity of gender identity and expression as much as possible, leaving space for nuance, disagreement and contradictions.
- Invest in capacity building for people using data of gender-diverse communities, which can take the form of toolkits, talk series, online platforms with relevant content, collaborative workshops and seed funding. This investment can be made by universities to train researchers at all levels of their careers, governments to train civil servants and other staff collecting gender data, companies that perform gender data collection providing workforce development for employees, and civil society organizations offering more substantial training in gender diversity to its advocates.
- As AI systems become more widely adopted and incorporated into public and private services, consider

unique needs and risks of transgender individuals when collecting data and deploying systems and carve out policy frameworks that encourage the sunsetting or banning of certain technologies like FRT or AGR.

Enablers: government, civil society and community-based organizations, community organizers and advocates, industry, academia

5. INVEST IN AND SUSTAIN PUBLIC, OPEN DATASETS

- Build ethical, public, and open datasets that comply with best practices and principles established in robust regulatory frameworks of data governance and protection, digital rights, and guidelines from the open movement.
- Consult with data practitioners and other specialists on priorities and expectations for public open datasets to improve data quality and interoperability while adhering to guidelines provided in the TDR framework.
- Invest in data security, protection, and privacy to avoid data breaches, cyberthreats and misuse of data about transgender individuals that should not be public neither open.

Enablers: government, civil society and community-based organizations, community organizers and advocates, industry, academia

6. DESIGN TRANS-FRIENDLY AI IMPACT ASSESSMENTS AND TRANS-INCLUSIVE ADOPTION TOOLS

- Consider risks and harms related to gender identity and transition when developing AI impact assessments, algorithmic impact assessments, data protection impact assessments, and human rights impact assessments, and when planning the adoption of AI systems that provide services for surveillance.
- Collaborate with multistakeholder specialists to set standards, methodologies and guidelines for AI acquisition and deployment that include risks and harms related to gender identity and transition or any other aspect that unfairly impact gender-diverse communities.
- Create strategies to prevent harm that are the responsibility of multiple stakeholders. The strategies can be created and implemented by government, intergovernmental agencies, community-based organizations, civil society organizations, researchers and industry, such as capacity building, but also developing risk and impact assessments before collecting the data. This process also includes strategies to mitigate bias based on best practices widely debated and developed by, for and with the communities.
- Pay civil society organization representatives, community organizers and advocates for the time, expertise and efforts providing to improve and mitigate harm in AI models.
- Design clear norms and guidelines for AI procurement and public-private partnerships in a multistakeholder dialogue that encourages principles of human rights and trans-inclusive data justice in their policies and practice.
- Hire transgender individuals to participate in the development, deployment and evaluation of AI models or be a part of teams that build AI systems.
- Consider the trans digital rights framework when advocating for public interest AI.

Enablers: government, civil society and community-based organizations, community organizers and advocates, industry, academia

7. PRIORITIZE RESPONSIBLE, ETHICAL AND TRANS-FRIENDLY CARE

- Create mechanisms to ensure vendors of technology services to schools, universities, social services. hospitals, clinics and other service providers abide by digital rights principles and guidelines, especially when such tools are used to provide care for the transgender community.
- Advocate for the end of trans-related data sharing with law enforcement.
- Improve inclusive practices to allow the trans community to feel respected in different settings, such as allowing preferred names, using the right pronouns, preventing data leaks, and following TDR principles and best practices established over the years by trans advocates.
- Consult with end-users to make technology user-friendly, trans-friendly, safe, needs-based, and accessible.
- Identify the need for trans-friendly and trans-specific care that can be provided virtually.

- In terms of GAC, build and publish protocols to guide the responsible and ethical deployment of telehealth applications in consultation with specialists from different fields (medicine, law, public policy, data science, trans studies) and practitioners (health, IT, social services, legal services, advocates for trans and digital rights).- Consider meaningful co-design of digital health systems, including consumer and community engagement methods.

Enablers: government, civil society and community-based organizations, community organizers and advocates, industry, academia

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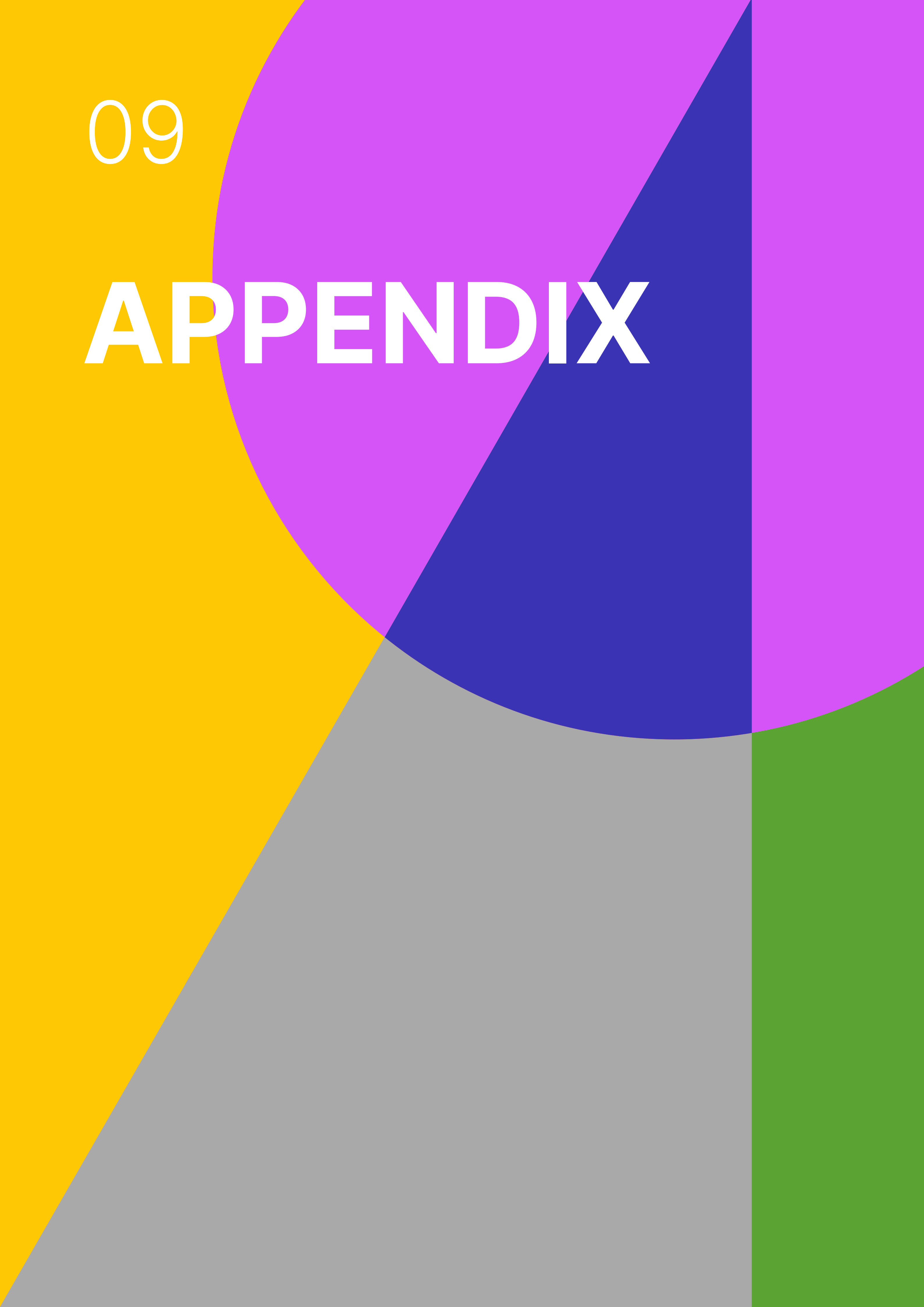

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APPENDIX

A NOTE ON THE RESEARCH METHODS

In terms of methodological framework, this project is divided into two components:

A. A transdisciplinary literature review that incorporates theoretical frameworks and empirical and applied research findings. We also included knowledge produced outside of universities and colleges, such as reports and research findings published by think tanks, advocacy organizations, other nonprofits and the private and philanthropic sectors. Readings and resources were limited to the languages spoken by the authors.

B. Legal and policy analysis within the scope of the project. For the legal part, it covers laws, bills, executive orders, ordinances, and jurisprudence concerning data privacy and protection whenever available, data sanctuaries for trans people, gender identity and expressions whenever available, anti-trans bills and issues of health equity that affect either digital rights or gender-diverse communities. For the policy part, we used information made available about programs, policies and policy briefs, FOIA requests, reports, and white papers.

The project used secondary data publicly available and, since it does include human subjects in the study, received an exemption from SBS-IRB at UVA.

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