



TOWARD ETHICAL TECHNOLOGY:

Framing Human Rights in the Future of Digital Innovation

By Arpitha Peteru and Sabrina Hersi Issa

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PREFACE

[Rights x Tech](#) is a forum and community that explicitly explores the intersections of technology and power. We bring together technologists, policymakers, and movement leaders for dialogue and solution-building on emerging issues around human rights, products, and power.

This report is the product of an effort to examine and synthesize intersectional movements to build better, more inclusive, and humane technologies. It describes principles for systemic inclusion and dynamic forces shaping the future of ethical technology. The research and analysis was built on a mix of qualitative interviews with movement leaders, a substantial review of relevant literature, and a field analysis through a systems lens. This paper explores possibilities and offers mechanisms to unlock levers for positive, sustainable change that prioritizes the well-being of communities of color in the future of innovation.

The goal of this report is to introduce a set of principles and inclusive frameworks to help platform, product, and policy leaders conceptualize intentional ethical technology that is responsive to the needs of impacted communities and shape meaningful interventions for systems-level shifts at the intersections of technology and human rights.

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INTRODUCTION

Today's Technologies Are Harming Marginalized Communities at an Unprecedented Scale and Pace

“If you have come here to help me, you are wasting your time. But if you have come because your liberation is bound up with mine, then let us work together.”

– Lilla Watson, Aboriginal elder, activist, and educator from Queensland, Australia

In the Ronald Reagan Presidential Library, there are pamphlets documenting intentionally misleading instructions for Black people to vote on a Wednesday. This is the image Brandi Collins-Dexter, senior campaign director at Color of Change and a 2019 Joan Shorenstein Fellow, shared with us to illustrate how misinformation and disinformation are deployed to “disrupt Black political organizing and neutralize the Black vote” in the public square.¹

The 2016 U.S. presidential election cycle ushered such nefarious practices to the main stage, spotlighting the pervasive and unchecked realities of social media, unethical industry-wide data practices, a lack of safeguards for consumer internet users, and the manipulation of the digital public square. Since then, the rise of global crises — such as the COVID-19 pandemic — elevated technology to center stage as a chief facilitator of daily civic life and catapulted society to a new level of reliance on technology leading into the 2020 U.S. Census and the country's 2020 elections. While this hyper-digital life has been easily navigated by some, it has created friction and harms that disproportionately impact women and communities of color, often in discrete or invisible ways. The evolution of this “new normal” only reinforces the urgency for algorithmic accountability and ethical technologies now.

A critical examination of the impact and influence of technology platforms' practices and policies on public life and civic participation is overdue. Mainstream tools such as Facebook, Twitter, and WhatsApp have been used to perpetrate harm against Black, Brown, Indigenous, and people of color (BBIPOC). With multiple, recent episodes of mass data corruption on the scale of the Cambridge Analytica scandal, platforms are no longer just playing host to political discord; they are responsible for rapidly scaling dehumanization. Deliberately deceptive political tactics, such as Black residents receiving fake and misguided robocalls for voting, have a long history in political election cycles throughout such key battleground states as Florida, Louisiana, Ohio, Pennsylvania, and Virginia. Digitizing these oppressive strategies is simply a direct evolution of the critical function technology platforms play in modern democratic participation.

The Invisible War

Today's internet platforms and powerful technologies are accelerating and amplifying the speed and spread of harm. Often hard for the public to recognize, such harm is obscured by technology companies' lack of public transparency, which is exploited to their benefit. As Collins-Dexter explains, “Media justice and tech accountability are kind of like the invisible war we don't know is being waged against us. People understand criminal justice, economic justice, health justice, but they don't understand media justice and these tech fights that we're in.”²

For example, in November 2019, Apple Inc., in partnership with Goldman Sachs, launched a highly anticipated titanium credit card designed to integrate with the Apple Pay app on Apple devices. Following the release, however, the card received widespread attention for racial and gender bias in its

credit-limit allocations! This prompted outcry from many high-profile figures in technology, including Cathy O’Neil, author of *Weapons of Math Destruction*.

As with Collins-Dexter, O’Neil’s analysis references invisibility and the complete absence of transparency: “[T]he problem of course is that it’s really hard to know exactly what went wrong with this opaque algorithm. Most algorithmic harm flies entirely under the radar. It happens in the context of people trying to get a job, but they never get interviewed because they’re filtered out by algorithmic job hiring. So how would they know the reason they didn’t get the interview was because an algorithm unfairly labeled them as lazy or whatever it was? ... It’s this invisible system of harm.”³

Another example of the intersecting ways with which technology platforms scale dehumanization without accountability and public transparency: the 2019 lawsuit filed against Lyft Inc. by reproductive justice leader Alison Turkos. Although Turkos was kidnapped at gunpoint, driven across state lines, and sexually assaulted by a Lyft driver,⁴ the company still charged Turkos for the cost of the ride and kept the driver active on the platform.⁵ Lyft has been sued for sexual assault by 26 passengers, but Turkos’s lawsuit is the first one filed with her real name on the record, rather than being listed as a Jane Doe. “For those of us who can speak out and loudly, we do so not just to take a step toward justice for ourselves but in hope to change the system for others,” Turkos explains.⁶

Turkos has expertise in power dynamics and understands the forces that work against justice. “It’s not that we haven’t tried, or that we aren’t

trying,” she says, “it’s that we are a rowboat in the middle of a hurricane.”

This case highlights the critical need for measures of systems-wide transparency and accountability that ensure baseline safeguards. These measures should apply not only to Lyft but to all technology platforms that are increasingly replacing public infrastructure and facilitating daily life.

Nothing Is Neutral

Such opacity has made it more difficult to intuitively understand the breadth and depth of harm perpetuated and reinforced by the mainstream technology ecosystem. This opacity is compounded by the fact that technology can often be perceived as inherently neutral, apolitical, objective, or even intrinsically good for society by many institutional power holders who are far removed from accountability and impacted communities.

One of the foundational points of Professor Ruha Benjamin, who writes widely about the social dimensions of science, technology, and medicine, is the “halo effect” bestowed on technology and, more broadly, on science. Technology products and platforms benefit from a culture that, by default, considers the outcomes of its activities as “progress,” wrapped under a cloak of benevolence. When evidence is presented to indicate otherwise, there are not normative mechanisms or systems in place to “deal with” such concerns. Instead, harms and negative outcomes are dismissed after minimal discussion and rationalized as inevitable missteps or glitches that are necessary for any innovation or social advancement to succeed. “Move fast and break things” stubbornly remains the motto for this field.

i David Heinemeier Hansson, a prominent (white, male) software engineer, recently posted a Twitter thread after finding out his Apple Card credit limit. In his viral posts, he revealed that his wife Jamie Heinemeier Hansson was given a credit limit 20x lower than his own, despite having a better and longer credit history than David, as well as shared financial accounts and other positive credit indicators. With David’s status in the technology industry, as well as others coming forward with the same experience with Apple Card, this situation has received much attention from mainstream media, which has highlighted algorithmic sexism and discrimination and the lack of transparency.

The absence of both cultural norms and system-level principles to address human suffering means further suffering continues to expand. The field's naively flawed thinking not only is overly simplistic but also reinforces tech-solutionism that ignores opportunities to meaningfully address the vulnerabilities of entire communities of people who are repeatedly victimized by platforms manipulated to undermine human rights and promote violence.

This mentality implicitly lays the foundation for technology's amplification of prejudices and its exacerbation of deeply entrenched societal inequalities. Drawing on Michelle Alexander's *The New Jim Crow*, Ruha Benjamin coined the term the "New Jim Code" to refer to "the employment of new technologies that reflect and reproduce existing inequalities but that are promoted and perceived as more objective or progressive than the discriminator systems of a previous era."⁷

In her book *Race After Technology*, Benjamin notes the roots of this New Jim Code are not always grounded in malicious intent: "Far from coming upon a sinister story of racist programmers scheming in the dark corners of the web, we will find that the desire for objectivity, efficiency, profitability, and progress fuels the pursuit of technical fixes across many different social arenas. Oh, if only there were a way to slay centuries of racial demons with a social justice bot! But, as we will see, the road to inequity is paved with technical fixes."⁸

Algorithmic harm is pervasive. Technological tools, even with iterative improvements, are far from impartial. One need not look too long before finding reports of aggressive silencing of activists and identity-based groups, such as the Rohingya, Uighurs, Indigenous activists, and Muslim communities, as well as racialized surveillance of primarily Black, Brown, and immigrant communities through social media, data monitoring, biometric technology, consumer communications technologies, and public assistance programs.

As Virginia Eubanks writes in *Automating Inequality*, "Marginalized groups face higher levels of data collection when they access public benefits, walk through highly policed neighborhoods, enter the health-care system, or cross national borders. That data acts to reinforce their marginality when it is used to target them for suspicion and extra scrutiny."⁹

The Path to Systemic Solutions

Countless cases across the United States and around the world illustrate how the scale, speed, and disparate impact of exclusionary technologies are transnational. Therefore, it is imperative that communities and other stakeholders working to dismantle and counter these injustices build this work to extend beyond borders. The only way to counter systematic exclusion is through systemic inclusion.

There is a space to create, improve upon, and scale inclusive, solidaristic solutions that build power across identities, communities, issues, and sectors: a space to create the kind of digital future that affirms humanity and expands human rights.

This report explores and highlights critical themes that emerge from movement-building in this context, with a focus on the complex intersectionality at play. These insights are meant to reflect the nuances of how movement leaders, builders, technologists, and scholars are approaching technology, justice, and accountability, framed around three overarching principles for systemic inclusion in the design of ethical technologies:

- How you create informs what you create
- Your process determines your product
- Reframe dominant narratives to reposition power

These principles are intended to offer a path toward centering human rights principles into the processes and policies shaping ethical technologies. These outcomes are not only possible but also

imperative to ensure a future where all people can fully, safely, and inclusively participate in democratic life. Leveraging and implementing this framework, technology platforms can build inclusive, solidaristic solutions with communities across identity groups, issues, and sectors that are necessary to cultivate collective power and transform current systems into creating a future where we all can thrive.



SYSTEMIC INCLUSION PRINCIPLE I: HOW YOU CREATE INFORMS WHAT YOU CREATE

Technology's impact on public life intersects across identities, issues, and sectors, giving rise to complex mechanisms that exacerbate inequalities in power, knowledge production, trauma, and well-being.

There is an intrinsic relationship between online agency and offline power-building in the fight for justice and equity. But in an era when everyday existence in democratic and public life is facilitated by technology, online and offline states are not a binary. Digital devices, tools, and platforms fall across a continuum of unequal, inconsistent, and outsized power dynamics. Complex nuances of race, gender, sexuality, and power intersect forcefully with inequities that are exacerbated by technological constraints. Discourse and strategies to address inequity must be informed by addressing these existing dimensions and constraints.

In this context, understanding intersectionality requires a holistic and systematic approach, what is referred to as a whole-system approach, to examine the racialized and gendered ways that knowledge is produced and power is maintained, not just on the internet but also within open-source communities.ⁱⁱ As multiply marginalized communities experience harm, movements are working to be inclusive, participatory, centered on people and communities, and sensitive to the linkages between issues, as well as identities, rather than only focusing on “technical fixes.”

Multiply marginalized (or multiple marginalized) individuals are those who identify as belonging to more than one underrepresented or marginalized

community — for example, individuals who identify as LGBTQ+BBIPOC or women of color who are also returning citizens. These are the users who experience the most profound harm on platforms, because the harms are magnified and compounded upon layers of identity. In addition to a greater exposure to harm, marginalized and multiply marginalized communities also often lack access to protective mechanisms that adequately account for these vulnerabilities. In many such cases, mainstream technology platforms and products amplify and accelerate the scale and speed of harm, with no clear, reliable, or consistent pathways toward true accountability.

A telling example of how technology's constraints, offline power, and multiply marginalized communities intersect can be found in the way prison systems handle technology for deaf prisoners. According to The Marshall Project, “The technology provided to deaf people in most U.S. prisons is a teletypewriter, a machine developed in the 1960s that requires users to type their messages. The system is rife with problems. Most deaf households have switched to some kind of videophone, which allows users to speak in sign language. But prisons across the country still use the outdated system, known as TTY or TDD (telecommunications device for the deaf), leaving many deaf inmates cut off from loved ones.”¹⁰

Few households still have TDD systems. And in the off chance a connection is successfully established, the time required to get the outdated system to

ii A whole-system approach refers to a methodology that allows users to see things “wholly” and in relation to the system in which they exist. It examines actors and factors within a system and focuses on the dynamic *interactions* between them. It can capture both hidden and visible dynamics, thereby accounting for unintended consequences more than other frameworks. The method can be used for all phases of a project lifecycle, including assessment, forecasting, analysis, synthesis, decision-making, monitoring, evaluation, and learning. Whole-system approaches seem to be more widely adopted in the science (natural systems) and public health fields.

function uses up much, if not all, of the brief time allotted for such calls, typically 15 minutes. The failure of prison systems to incorporate or prioritize modern adaptive technology for deaf communities expands harm, disconnection, and social isolation within an already bleak context.

Talila Lewis, a social justice engineer, educator, organizer, attorney, and artist, emphasizes the importance of grounding this discrimination within a larger context of anti-Black racism. As a leading voice in the social justice and disability rights movement, she spoke at the 2019 Data for Black Lives convening, stating: “Within the prison industrial complex, the disabled are even more viciously targeted and disproportionately affected. Disabilities have been weaponized and are based in ableism which is rooted in anti-Blackness.”¹¹

Movement leaders’ well-placed emphasis on intersectionality reinforces the broader need for a whole-system approach from the network of other actors in the technology ecosystem. Community-based actors, as vital as they are in designing and leading movements, cannot be the only ones working within this framework. Resource providers, funders, and capacity-building organizations must also strategically prioritize intersectionality and whole-system thinking as a means to better understand interconnections and engage in more effective co-creation of solutions, especially for complex challenges like technology platform accountability.

Intersectional interventions can help expand solutions-building possibilities and avoid instances where improving conditions for one group in a given context can have hidden, unintentional effects that lead to worsening conditions for another group in another context. Many activists therefore encourage intentional co-production and collaboration to develop consumer internet products.

There is power in participation. And while community-led participatory efforts lead to

meaningful intersectional solutions, there are several barriers to realizing their full potential in the technology ecosystem. One of the chief barriers is the exclusionary manner in which technical expertise and knowledge is “prestigious” and racialized.

The continuing efforts of community-based movements to build intersectional solutions are largely siloed from the broader, mainstream consumer technology ecosystem. The incisive analysis, product-market innovation, and effective organizing that stem from these intersectional solutions are invaluable to the consumer technology field. Yet community-based efforts in this space are still sorely under-resourced and not sufficiently staffed in a sustainable manner that would lead to broader consumer adoption. Interventions from product leaders inside the consumer technology ecosystem are also under-resourced and staffed as largely volunteer efforts, structurally limiting capacity to integrate these solutions at scale.

Take, for instance, a project created by Automattic Inc. engineer Cate Huston and Android developer Chiu-Ki Chan in 2014. *Technically Speaking* was their initiative to support public leadership of underrepresented minorities in technology.¹² The effort was explicitly intersectional, rapidly scaling training and other public leadership resources to underrepresented individuals who directly shape the future of major technology platforms and products. But as a volunteer side project, the initiative was not sustainable. In 2018, the duo placed the project on indefinite hiatus.¹³

Trainings and leadership resources are one approach to addressing structural inequities, but there are limits to how far such interventions can be carried without resources. The lack of sustained representation is less about technical skillset and more about deeply embedded biases and toxic “tech culture,” which relies on heavily skewed power dynamics. Ruha Benjamin illustrates how inequitable dynamics are the result of entrenched

power imbalances with an example from design systems — specifically, the dynamics between those who “work” and those who “design,” even when the designers support justice and public-interest values. She offers the nuanced perspective raised by developers Lilly Irani and M. Six Silberman: “What if the problem is not how we design in a highly unequal world, but the very fact that we are read as designers at all?’ [...] And what they found was that, in public depictions of their work, designers were elevated while workers were cast as being ‘without agency and capacity to change their situations.’ Even though they themselves were guided by a solidaristic relationship with the workers, the public granted them, as ‘designers,’ a higher status than to their laboring counterparts.”¹⁴ Biases toward designers (i.e., those with “technical skill”) and non-designers (i.e., those without “technical skill”) are quite consequential.

Who qualifies as an authority or knowledge expert? Who gets to build the future? The role status plays into perceived legitimacy directly factors into knowledge production. Knowledge production shapes public discourse, which feeds into policies and products, which, in turn, reaffirm status. In this way, what may appear to be just an “unbalanced dynamic” between designer and non-designer actually catalyzes a vicious cycle that has structural and systemic repercussions.

To be clear, this is not about having or lacking a technical skillset. Even with advanced technical skills, people of color, immigrants, women, and queer people are still not considered to have legitimate authority by mainstream technology actors. Although these are the communities that are most negatively impacted by profit-driven technologies, they have not been meaningfully engaged en masse

about these technologies, how they are impacted by them, or what they want to see in the future — key participatory steps necessary for reframing the dominant narrative that currently revolves around techno-determinism.ⁱⁱⁱ

How can the field reconsider perceptions of legitimacy and knowledge production beyond status and tokenization?

No one authority or sector holds a monopoly on ideas, imagination, or design. The manner with which “prestige” and “expertise” are racially coded in the broader culture as “white” and “male” disqualifies the status-quo players who are considered vanguards of innovation by default. To actualize the power and potential of intersectional technology, it is necessary to reimagine all systems of technology development, including channels of knowledge production. There is a radically expansive opportunity to incorporate a more inclusive consideration of expertise that is representative of diverse experiences and perspectives.

There is a dire need for intentional coordination with communities of color, immigrants, women, and LGBTQ communities to lead systematic reconceptualization of ethical technology. Long-term resources are necessary for community-based organizations to invest in bridge-building between these communities to share, trust, and build together (often called “for us, by us”). Not only for moral objectives, but because the outcomes of community-led, intersectional technology built upon ethical frameworks are more likely to produce sustainable and equitable solutions for a shared future.

Many movement leaders have consistently found that institutional technology leaders operating under institutional incentives lack the aspirational

iii Techno-determinism is the idea that technology shapes society, rather than a symbiotic relationship of co-production. It is important to note, as Benjamin writes, “[i]n line with the focus on glitches, researchers tend to concentrate on how the Internet perpetuates or mediates racial prejudice at the individual level rather than analyze how racism shapes infrastructure and design.”

investment to imagine a different, radically inclusive future that is centered on more than public perception and harm reduction. To achieve this type of aspirational investment, movement builders must be recognized as technological co-creators and system experts whose knowledge capital includes their expertise on the consequences of algorithmic injustice and other facets of the New Jim Code.

In the technology ecosystem, today's status quo perpetuates and reinforces what Benjamin describes as the New Jim Code. The technology industry must proactively work with communities to challenge and dismantle design that upholds white supremacy. Technology practitioners and developers need to leverage every opportunity to integrate ethical frameworks into platform development and meaningfully resource interventions to reshape perceptions that tie default knowledge expertise with the status quo. These are only the beginning steps necessary to push the field to acknowledge and fully reckon with complicity in systems of power and oppression and to curb continual wildfires of trauma and algorithmic violence, with the longer-term goal of working to *prevent* harm and create ethical technologies.



SYSTEMIC INCLUSION PRINCIPLE 2: YOUR PROCESS DETERMINES YOUR PRODUCT



[T]he practice of codifying existing social prejudices into a technical system is even harder to detect when the stated purpose of a particular technology is to override human prejudice.”

– Ruha Benjamin, *Race After Technology*

Data discrimination leads to biased sets of search algorithms that privilege whiteness and discriminate against people of color, specifically women of color, transgender, and gender nonconforming individuals. The practices frequently weaponized against these groups include data mining, scoring, surveillance, and predictive software. As Our Data Bodies noted in their *Digital Defense Playbook*, “This work is critical, because our data are our stories. When our data are manipulated, distorted, stolen, exploited, or misused, our communities are stifled, obstructed, or repressed, and our ability to self-determine and prosper is systematically controlled.”¹⁵

If technology leaders seek to understand how exactly their tools will be shaped into shields or weapons, they have to turn to people from communities that are consistently and disproportionately at risk of having technology used unjustly against them.

Contrary to some beliefs, algorithmic design does not replace human prejudice; it merely replicates discrimination in a digital context. Once again, this is a deflection of accountability for technology that is notoriously flawed, inaccurate, and disproportionately impacts people of color negatively. As Malkia Devich-Cyril, founder and former executive director of MediaJustice (formerly Center for Media Justice), explains, “In the context of existing racial bias in the criminal legal system and in counterterrorism, it should be no one’s goal to make the technology easier to use against people of color — especially Black, AMEMSA [Arab, Middle

Eastern, Muslim and South Asian] communities and undocumented people. [...] Whether it’s racist because it’s accurate or because it’s inaccurate, facial recognition and biometric tools in general fuel racial bias. No amount of money or informed consent is enough to produce a weakly regulated technology already being used to violate the human rights of millions.”¹⁶

Joy Buolamwini, founder of the Algorithmic Justice League, similarly cautions against an emphasis on whether facial recognition technology is accurate or not: “If we don’t have oversight of how these technologies are being used, regardless of accuracy, they will be weaponized against us.”¹⁷

The fact that weaponization is a reality demonstrates the real vulnerabilities of visibility, which is easy to observe in the policies and practices of state-sanctioned surveillance in the United States. With systemic surveillance, bias begets more bias, as the technologies used are notoriously flawed; capture private information through nontransparent, unethical methods; and perpetuate discriminatory and biased outcomes.

In October 2019, the American Civil Liberties Union (ACLU) announced a lawsuit against the FBI, Department of Justice, and the U.S. Drug Enforcement Agency for secretly using facial recognition software to track civilians in many activist groups, “including racial justice movements, Occupy Wall Street, environmentalists, Palestinian solidarity activists, Abolish ICE protesters, and Cuba and Iran normalization proponents. In recent years, the FBI has wasted considerable resources to spy on Black activists, who the agency labeled ‘Black Identity Extremists’ to justify even more surveillance of the Black Lives Matter movement and other fights for racial justice. The agency has also investigated climate justice activists, including 350.org and the

Standing Rock water protectors under the banner of protecting national security.”¹⁸ The FBI’s lack of transparency and blatant targeting of marginalized communities reinforces movement leaders’ justifiable alarm over a lack of oversight, accountability, and ethics. All of these negative conditions further exacerbate power imbalances and negatively impact BBIPOC communities. These technologies uniquely enable the FBI to use, what the ACLU calls, “undetected, persistent, and suspicionless surveillance on an unprecedented scale.”¹⁹

In a related case, the ACLU filed a Freedom of Information Act request seeking information about the FBI’s social media surveillance of immigrants. “The ACLU sought information about the FBI’s social media related policies and guidance, records

concerning the purchase and acquisition of social media surveillance technologies, and records concerning the algorithms and analytics used to operate the program.”²⁰ In November 2019, a federal judge in California ordered the FBI to disclose the existence of its social media monitoring program.²¹

Without integrating the realities of racism and oppression into how companies build technologies and how these tools are continuously leveraged to perpetuate harm for communities of color, these structures and systems will continually fail to face the world as it presently exists. When we imagine the future of digital innovation in our democracy, we must do so with human rights at the center.



SYSTEMIC INCLUSION PRINCIPLE 3: REFRAME DOMINANT NARRATIVES TO REPOSITION POWER



Accountability is not a destination, it is a skill we can build and practice. It is an art, a craft, an alchemy we can learn how to wield, just as we have learned how to wield hurt and shame and fear.”

– Mia Mingus, writer, educator, and community organizer^{iv}

There is an opportunity to build more inclusive futures. It will take stakeholders from different sectors and fields committing to reframe dominant narratives in ways that intentionally account for stark power imbalances. It is important to understand that part of communities building power is creating a foundation; another part is repositioning existing power. It will be impossible for technology companies to run platforms and systems that effectively include human rights, enable equity, and share power if they do not first incorporate principles of equity into how platforms and products are created.

Technology developers would need to recognize their own role and responsibility as a power builder to proactively benefit from the insights of movement organizations that have played crucial roles in shaping meaningful interventions to hold power accountable. In the absence of more upstream strategies, the most common interventions that leverage movement leadership are rapid-response-type accountability campaigns and programs. While considered indispensable and heroic, such operations are resource intensive for organizations. One way the field can mitigate an overreliance on these reactionary strategies is

to intentionally source technology leadership and policy guidance from innovators beyond the usual echo chambers. This can enable more sustained power shifts throughout the entire lifecycle of technology and platform development, not just after-the-fact responses to platform failures.

It is not enough to build a reactionary movement ecosystem to hold technology companies accountable to human rights and the humanity of their users. Alicia Garza, co-founder of Black Lives Matter, offers her insights on reactionary tendencies and holding technology companies accountable for this research: “Being responsive to needs is important but the sustainability around responsiveness is contesting for power.”²² Technology “for us, by us” is a worthy ideal and pursuit, but we have to reckon with the fact that we have not curbed our use of technologies that are neither “for us” nor “by us.” This solution as it stands, as Garza emphasizes, doesn’t challenge power as it operates now.

On what it will take to create real accountability, she quickly responds, “It takes organizing. For example, groups like Mijente are doing really interesting work

iv Mingus identifies as a queer, physically disabled Korean transracial and transnational adoptee raised in the Caribbean.

around this.”^v Garza highlighted Mijente’s efforts to explicitly connect the consequences of immigration policies to the technology sector, pushing people to focus on who is developing digital tools that track communities. These kinds of rigorous corporate accountability campaigns, she explains, can effectively create “room for those inside the sector to start doing this work.” On the importance of capturing the right nuances, she commends how Mijente exposes Palantir and Microsoft as major offenders for their roles in creating technologies used to surveil, imprison, and deport. Mijente also brings attention to the contradictions between the human rights language the companies co-opt and hide behind, yet they fail to live out these values through their actions.²³

Embracing complexity is the key to a better digital future. Because technology is shaped by people, their frameworks, values, assumptions, and belief systems, it is reasonable to extrapolate that future technology platforms can be anchored in equity, collective empowerment, solidarity, and more than just notions of power. Movement strategists navigate a fine line between criticizing and boycotting the platforms harming people of color and relying on those same platforms as meaningful organizing channels. The dynamics are complex but as Collins-Dexter observes, “It isn’t so straightforward especially when there are currently more people who use Facebook than there are people who self-identify as Christians in the world.”²⁴

The sheer scale of membership makes the strategic effectiveness of user boycotts of platforms like Twitter, Facebook, WhatsApp, and other channels questionable. It also presents an ever more powerful opportunity to hold companies accountable for their

increasingly egregious business practices. What this tension introduces is an organizing challenge for movement builders in the technology accountability space and a call to reject default settings as the only settings for reality.

Without meaningful and immediate shifts, these problems will persist and likely worsen before getting better, particularly as the power these companies hold continues to increase exponentially. During an interview with Facing South’s *Voices of Resistance* series, the executive director of the Progressive Technology Project,^{vi} Alice Aguilar, emphasizes this point: “[T]he monopolization of the internet is a big threat. In some cities, that’s going to seriously debilitate our movement’s ability to speak, tell our stories, and communicate quickly. Yes, face-to-face and on-the-ground organizing is so important, but we also use technology to get things out quickly, so privatization that gives corporations the right to do whatever they want to do is a serious threat to the movement.”²⁵

Legal channels and strategic litigation continue to hold promise for meaningful accountability and necessary structural reforms. There is, however, a need for consistent investment in mainstream movement organizations to sustain deeper intervention over a longer period of time. For instance, it took consistent, sustained efforts to produce accountability outcomes for Facebook’s profit-maximizing advertising system that reinforces social inequities. This example is “a perfect illustration of why the ‘disparate impact’ doctrine — a bedrock principle of civil-rights law — is such an important tool in the era of algorithms. Under disparate impact, even unintentional actions can amount to illegal discrimination if they have an

v Mijente describes itself as a digital and grassroots hub for Latinx and Chicanx movement building and organizing. It is known for its #NoTechforICE campaign targeting large technology corporations’ complicity in dehumanization and deportations. Mijente’s website: <https://mijente.net/2019/04/30/an-introduction-to-mijente/>.

vi Progressive Technology Project (PTP) describes itself as a Texas-based organization that “works alongside communities of color to find ways to use technology as a tool to build power.” PTP’s website: <https://progressivetech.org/>.

adverse impact on protected groups. Without this doctrine, opaque, machine-driven predictions are effectively above the law, as long as they don't directly consider data indicating that a user belongs to a protected class."²⁶

Other states, such as California and Oregon, are pursuing accountability through technology adoption restrictions in city and state legislation. In May 2019, San Francisco was the first U.S. city to ban the use of facial recognition tools by city government and police officers. Statewide, California has banned the use of facial recognition technology in police body cameras. Other places across the country are exploring similar laws. All of these legal and policy interventions required coordinated, sustained, and resourced efforts.

Even as channels for technology accountability expand, whether in the media or through legislation, the dominant discourse tends to focus more on short-term fixes and protecting source code rather than the societal costs and structural aspects of oppressive, discriminatory technologies. This industry-led framing strategically veils the potential for real, systemic harm toward vulnerable communities by technology that has long been the instrument of disenfranchisement and criminalization of women, people of color, and immigrants throughout history. There is no reason to believe this will be any different in the future without meaningful strategic interventions and structural shifts to how the ecosystem operates and what it values and incentivizes.

"Facts alone will not save us," Ruha Benjamin emphasized in her opening remarks at the inaugural Data for Black Lives conference.²⁷ While

the takeaways in this report may seem obvious to those deeply embedded in this work, it is sobering to remember that the dominant narrative virtually eradicates the impact of algorithmic violence against people of color and women of color.

Erasure of this extent is a harsh reminder of how much "work" there is to be done and supports the need to prioritize well-being as a strategic intervention, especially for the preservation and safety of leaders from impacted communities. There is a need to build an ecosystem with a more expansive narrative and vision, one which actively affirms its users' humanity and intentionally includes leaders who are building a future where all can thrive. Communities need more explicitly intentional spaces to continue to build power and shape narratives that capture the nuances of their lived experiences and solidarity — spaces upon which an innovative and inclusive future can be constructed and sustained.

With marginalized communities facing consistent and increasing violence and targeting, both online and offline, the experience of collective trauma is compounding and scaling rapidly. Change is possible and accountability is achievable, but both require a deliberate, intentional investment sustained over time. Strategic interventions must include measures that prioritize the safety and well-being of leaders who put their energy and bodies on the frontlines for their community's right to exist and thrive. Although the ecosystem for building sustainable collaborations to shape intersectional technology and ethical technological policies is nascent, there are abundant opportunities for values-centered spaces to grow.

LOOKING FORWARD: A PORTAL FOR SYSTEMIC CHANGE AND TRANSFORMATION



The world is wrong. You can't put the past behind you. It's buried in you; it's turned your flesh into its own cupboard.

– Claudia Rankine, Jamaican-American poet

We cannot live in fires; fighting them is absolutely crucial, life-saving work. Recognizing that the work discussed in this report must be preventive, forward-looking, and built into the long processes of system transformation introduces both hope and the added weight of collective responsibilities for care that communities and companies must bear. With all necessary work that lies ahead, the technology ecosystem must prioritize and integrate collective well-being and mental health into the broader infrastructure for digital resilience and innovation.

In 2019, the Pew Research Center and Elon University's Imagining the Internet Center published a report examining the future of well-being in a digital world. Researchers asked approximately 1,150 technology experts, scholars, and health specialists the following question: Over the next decade, how will changes in digital life impact people's overall physical and mental well-being?

"Some 47% of these respondents predict that individuals' well-being will be more helped than harmed by digital life in the next decade, while 32% say people's well-being will be more harmed than helped. The remaining 21% predict there will not be much change in people's well-being compared to now."²⁸

Given that this was a "non-scientific canvassing" with some glaring gaps (e.g., no substantive, explicit discussion of race or gender), the report's findings nonetheless align with the common fallacy of technological benevolence and indicate the need for a more nuanced understanding of well-being

and mental health in the digital sphere, particularly for Black, Brown, Indigenous, and people of color. Considering the urgency of the current mental health crisis, which has been exacerbated by the health and economic upheavals of 2020, this set of interlinked issues deserves deeper interrogation through a more systemic, intersectional lens. It is worth examining the role of well-being and mental health through the principles for systemic inclusion introduced in this report.

In the shadows of the 2020 U.S. Census, the outbreak of COVID-19, and the 2020 U.S. elections, movements and the communities they serve are struggling physically, mentally, emotionally, financially, individually, and collectively. Despite this, movement builders continue to pursue creative ways to organize their broader communities and sustain high-stakes mobilization. Now more than ever, the potential of platforms and other technological tools to serve as portals for equitable civic participation is evident, which begs the question: How do we transform this potential into a reality that can sustainably serve those at the margins of society?

In complex ecosystems, marginalized communities experience discrimination across multiple, interlinked layers: interpersonal (e.g., individual security and safety, content on platforms); geographic (e.g., digital divide, inequitable infrastructure development and access); structural (e.g., algorithmic biases, hierarchies of power); and institutional (e.g., inequitable treatment of BBIPOC and women in technology and positions of authority, racialized use of surveillance). Each of these layers can and do compound to produce outsized harm to vulnerable communities. With this in mind, it is necessary to reframe the origins and assumptions of risk, which has always defaulted to communities of color and not entrenched institutional power holders.

“Race is not a risk factor...racism is. LGBTQ identity is not a risk factor...homophobia/transphobia is,” as Yeshimabeit Milner, co-founder for Data for Black Lives, frequently notes.²⁹ By centering impacted voices at the heart of social-change movements, we can “optimize” equity, justice, and accountability efforts.

For work of this scale to be effective, it must focus on broader system-wide patterns, interventions, and investments rather than individuals, individual incidents, or even individual companies. There are, however, significant capacity gaps that are structural limitations to achieving this. At the moment, movement leaders rely on rapid-response campaigns of individual incidents or cases as a primary method of strategic intervention. It is critical to build a bridge beyond this and to weave individual cases into patterns that illustrate the collective shapes of systemic discrimination and structural solutions. The growing ubiquity of emerging technologies — such as smart devices, blockchain, and quantum computing — will continue to provide intervention opportunities to accelerate or decelerate the impact of these patterns.

All of this work leads to a broader query, perhaps the most challenging one of our time: Beyond individual accountability, how do we create accountable systems? The global system that produces institutional racism, structural inequities, implicit biases, and social norms and values is shaped by the dynamic interactions between factors and actors that repeatedly reinforce each other. To shift our roles from reaction to prevention and proactive transformation, the focus and investment must be at the structural level and on these dynamic interactions. Marbre Stahly-Butts’s comment about district attorneys captures the significance of deep structural change: “Having a Black face, a femme

face, etc., in that position means nothing if we don’t have structural change to reduce the power of the position. Benevolence isn’t transformation.”³⁰ ^{vii}

The familiar tenet of intent versus impact drives a similar point: Good intentions and well-meaning actions alone rarely result in positive transformative change for communities. The path to systemic transformation must go through steady, long-term, coordinated investments across the principles for systemic inclusion, which will help uncover key levers at the structural level. A variety of underutilized approaches to whole-systems thinking — particularly systems dynamics, participatory model-building, and other tools specifically designed for highly complex systems — can help decipher interactions between different factors and actors and refocus the narrative around root causes in visual, structural, and systematic ways.

While discrimination and harm can be perpetrated at the individual level, the issues discussed in this report are firmly rooted at the system level. And as with any system, there are critical feedback loops connecting inputs (biases, existing inequalities, lived experiences) to outputs (inability to accurately represent BBIPOC and women) to impact (unfair visibility, targeting, erasure of entire communities), which feeds back into inputs (more biases, entrenched inequalities). Indeed, what can often seem like the “unintended consequences of technology” is, in actuality, the explicit functions of such invisible feedback loops, producing a reinforcing effect. This quality is what makes complex problems complex: The problem exists within a system whose components constantly reinforce one another, thereby sustaining the problem. But by making these invisible loops visible and tackling them wholly, there is hope that meaningful interventions can achieve true prevention of harm.

vii Stahly-Butts is the executive director of Law for Black Lives, which describes itself as a Black femme-led national network of nearly 5,000 radical lawyers and legal workers committed to building a responsive legal infrastructure for movement organizations and cultivating a community of legal advocates trained in movement lawyering.

With the current state of technological design and the pervasive narrative of technological benevolence, the feedback loops in question here exist as negative ones (or, in the language of system archetypes, vicious cycles), designed to produce harm against marginalized communities. Because they are reinforcing, it is not enough to simply interrupt problematic loops; systems are resilient and will bounce back to produce historical outcomes. Therefore, the dynamic interactions must be addressed holistically by transforming those negative feedback loops into positive ones (virtuous cycles)

and/or countering them by creating new feedback loops that interact to reinforce favorable results.

To do this effectively, practitioners and supporters must commit to the nebulous, nonlinear work of discovering which interactions represent the best leverage points for change from a whole-system paradigm.^{viii} Direct, consistent, long-term support toward these levers in unison, rather than toward components in isolation, is what will ultimately shift the structure to spark the positive, self-sustaining, systemic transformation the digital public square deserves.

viii A system with this level of complexity, with all its historical layers, intersections, and hidden dynamics, makes it difficult to reliably identify and forecast the impact of these levers with standard methods. There are, however, interactive techniques and simulation software that can enable one to “test drive” different levers and strategies to assess probable results from a whole-system perspective, including potential unintended consequences. Although these approaches are underutilized in the social-change sector, including some mainstream systems thinkers, they are common in other fields (e.g., supply-chain optimization, climate-change modeling) and can help prevent strategies from backfiring or otherwise leading to unintended consequences.

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