KAPOR CENTER

EQUITABLE TECHNOLOGY POLICY

EQUITABLE TECHNOLOGY POLICY:

ENSURING THE PARTICIPATION AND PROTECTION OF BLACK, LATINX, & NATIVE COMMUNITIES IN THE TECHNOLOGY ECONOMY

The technology sector continues to play an increasingly important role in our national economy, employing 8.9M employees, paying 125% higher than the median national wage, and contributing $1.8T dollars to the U.S. economy. Beyond its economic significance, its ubiquity in our everyday lives can be seen in the percentage of the U.S. adult population that utilize social media regularly (70%), go online at least once per day (85%), depend on social media for news (42% of 18-29 year olds), and rely on technology to work and communicate.

Despite the importance of technology, ongoing challenges exist with the underrepresentation of Black, Latinx, and Native talent across all levels of the tech workforce; the underinvestment and lack of deployment of capital to entrepreneurs of color; automation's disproportionate displacement of Black workers; biased algorithms and products and their impacts on employment, education, and homeownership; facial recognition bias and impacts on policing, and surveillance; the spread of mis/disinformation on social media and its impacts on civic participation and vaccine hesitation; and the proliferation of harmful content (compounded by profit-driven business models) promoting teen depression, radicalization, extremism, white supremacy, and hate-based violence.

At the Kapor Center, we believe that technology has the power to solve pressing problems and close longstanding racial and social disparities across sectors. However, communities of color have yet to benefit from technology's power and potential for economic mobility, innovation, and justice-- and are simultaneously disproportionately harmed by unregulated technology products and platforms.

> At this moment in our country, we believe technology is central to the fight for racial justice. And, we believe that policy change is critical to transforming systems and structures preventing the full participation and protection of the most vulnerable communities across the technology ecosystem.

We have developed a framework for systemic change that outlines a set of nine core technology policy areas calling for expanded access to technology pathways, increased tech accountability and worker protections, and greater investment in infrastructure and innovation. As technology continues to evolve and advance, our society will continue to face complex challenges that require multi-faceted solutions. We believe that there is a role for the public sector, the private sector, and for public-private partnerships to advance racial justice and equity in technology. Collectively, we believe these components are instrumental to advancing opportunity, protecting marginalized communities, and transforming the technology sector.

Through our investments in research, programs, and partner organizations, we aim to:

(a) build awareness about the need for equitable technology policy and specifically, awareness about our nine technology policy priorities;

(b) build infrastructure and capacity for non-profit organizations, higher education institutions, researchers, and individuals to understand trends, develop solutions, and take action to advance equitable tech policy;

(c) drive collective advocacy leading to policy change across federal, state, and local levels and within the private sector.

OUR NINE TECHNOLOGY POLICY AREAS:

EXPAND ACCESS TO TECH PATHWAYS

1 Expand access and participation in K-12 computer science education and close racial equity gaps

2 Invest in new models of inclusive tech workforce development, including new models for upskilling, reskilling, and hiring

PROMOTE TECH ACCOUNTABILITY AND PROTECTIONS

3 Expand technology company workforce data collection, reporting, transparency, and accountability / oversight

4 Expand technology worker protections, including whistleblower protections, gig worker safety nets, and unions to ensure equitable labor practices

5 Ensure technology platforms are held accountable for harassment, violence, discrimination, mis /disinformation, and other harmful consequences of their content

6 Combat the harmful consequences of artificial intelligence and autonomous systems, and create standards for the future development and deployment of artificial intelligence systems

INCREASE TECH INFRASTRUCTURE AND INNOVATION INVESTMENTS

7 Close the digital divide through universal high-speed broadband access and adoption

8 Increase deployment of capital to diverse startup entrepreneurs, fund managers, and ecosystem-building organizations to support diversity in tech innovation

9 Support progressive taxation policies that ensure the wealth created by technology companies is reinvested in communities historically excluded from the technology sector

1 **EXPAND ACCESS AND PARTICIPATION IN K-12 COMPUTER SCIENCE EDUCATION AND CLOSE RACIAL EQUITY GAPS**

Despite the increased importance of computer science (CS) education, computational thinking, and computing literacy across all fields of study and occupations, our educational system has not kept pace to prepare students for participation in the future workforce and to be informed global citizens. Just 53% of high schools in the U.S. offer CS courses and just 1% of all high school students took an AP CS course in 2019--a strong predictor of pursuing CS in college and as a career. Low-income students, Black, Latinx, and Native students, and girls are significantly less likely to have access to CS courses, are less likely to participate in CS courses, and are less likely to pass CS courses when they do take them. Additional challenges to equity in K-12 CS include the lack of a robust and diverse CS teacher workforce, the lack of full integration of culturally responsive curriculum and pedagogical practices in CS classrooms, and broader educational disparities in funding, infrastructure, and core subject competency.

The lack of access and equity in K-12 CS education restricts the opportunities that all students have to develop computational literacies and to pursue computing in college and careers. Beyond that, all students must develop critical knowledge about the development, deployment, and social/ethical implications of technology to participate in a tech-driven global society. To invest in the development of a skilled and diverse future technological workforce we must change policies at the school, district, state, and national level; greatly expand funding and accountability mechanisms to support CS as a core subject; invest in a diverse CS teacher workforce; and address racial, socioeconomic, and gender disparities in CS access, participation, and success.

2 INVEST IN NEW MODELS OF INCLUSIVE TECHNOLOGY WORKFORCE DEVELOPMENT, INCLUDING NEW MODELS FOR UPSKILLING, RESKILLING, AND HIRING

Black, Latinx, and Native adults face numerous barriers to entry into the tech workforce, and remain significantly underrepresented across all levels of the technology industry. This exclusion from high-wage, high-growth technology jobs leaves these communities far more vulnerable to automation within low-wage roles, which have only been exacerbated by COVID-19. Barriers to entry into lucrative technology jobs include the gatekeeping practices restricting the number of Black, Latinx, Native students in computer science majors and among four-year CS degree earners, biases in the hiring process including the prioritization of hiring traditional four-year college talent from elite institutions, challenges with diversity, affordability, oversight and scale of nontraditional pathways including apprenticeships and bootcamps, and the lack of updated curriculum and certifications aligned with industry needs. Further, significant reskilling will be needed for current workers to meet post-pandemic demand for new digital skills.

These systemic challenges in education, workforce development, and talent acquisition, if left unaddressed, will continue to constrain the development of a robust and diverse pipeline of workers into the technology sector. To address longstanding occupational segregation and prepare workers of color for the tech-driven jobs of the future, robust investment in new models for upskilling, reskilling, and hiring are urgently needed, such as incentivizing skill-based hiring (as opposed to relying upon degree requirements), rapid expansion of apprenticeships in high-demand sectors (e.g., technology, clean energy, advanced manufacturing), investment in college affordability and community college modernization, and regulation of for-profit bootcamps and alternative pathways.

3 EXPAND TECHNOLOGY COMPANY WORKFORCE DATA COLLECTION, REPORTING, TRANSPARENCY, AND ACCOUNTABILITY / OVERSIGHT

The technology sector plays an increasingly important role in our national economy, yet the technology workforce does not reflect the demographics of the overall workforce and of its customer base. Tech workforce data show that Black, Latinx, Native, and female employees are starkly underrepresented at every level in the technology workforce — from entry-level to management, C-Suite, and Boards. Just 9% of the overall tech workforce is Black, compared to 14% of the U.S. workforce; and just 7% is Latinx, compared with 18% of the U.S. workforce. In Silicon Valley, women comprise just 30% of the technology workforce, while Black and Latinx women comprise <2%. And while the existing data show sharp, and unwavering disparities, there is a lack of consistent, rigorous, and transparent data collection and reporting to track technology workforce diversity trends and mechanisms for holding companies accountable.

The implications of the lack of racial and gender diversity in technology are significant and growing-- from income and wealth inequality, to representation in the design and deployment of technologies, loss of innovation potential, and the inability of the U.S. to meet future workforce needs. As one aspect of a comprehensive approach to increase technology workforce diversity, rigorous and consistent collection, reporting, and transparency of technology workforce data is necessary at the company, state, and federal level to track the entry and retention of Black, Latinx, Native, and female talent across technical vs. non-technical roles, management, C-suite, and Boards. Accordingly, accountability mechanisms are needed both in the public and private sector to further incentivize progress on workforce diversity commitments, to hold companies accountable for representation goals, and to take corrective action where needed.

4 EXPAND TECHNOLOGY WORKER PROTECTIONS, INCLUDING WHISTLEBLOWER PROTECTIONS, GIG WORKER SAFETY NETS, AND UNIONS TO ENSURE EQUITABLE LABOR PRACTICES

Central to the growth and success of tech companies are the workers. And yet, there are patterns of systematic mistreatment and exploitation of technology workers--especially workers of color, contract workers, and low-wage workers-- including instances of harassment and discrimination, pay inequity, retaliation against whistleblowers, and exclusion of most vulnerable workers (e.g., warehouse, gig, contractors) from living wages and benefits. The share of gig workers in the U.S. has grown rapidly in the last five years in areas including food delivery and transportation, and Black, Latinx, and Native workers are more likely to turn to gig work as their primary source of income, while playing a key role in the profitability and success of the tech platforms they work for. Similarly, contract workers comprise increasingly large portions of the tech workforce without equal pay, job security, and advancement opportunities. While many tech companies offering gig and contract work provide an economic lifeline and flexible work, gig and contract workers are not yet protected by laws that ensure a living wage, access to benefits, or the right to unionize.

To create more equitable and inclusive tech workplace environments, we must expand policies to protect workers of all classifications. Broader regulations and innovations are needed to address the structural inequality gig work foments, particularly among people of color, including implementing pay minimums, equal pay for equal work, providing benefits (through strategies like reclassification and/or portable benefits), collecting and publishing data on contract/gig workers (including technology companies and contracting agencies), and exploring less exploitative business models. It will also be critical to expand definitions of discrimination and harassment, expand complaint/reporting channels, remove Non-Disclosure Agreements (NDAs) and other mechanisms to unfairly silence employees, provide protection for whistleblowers, and ensure employees have the right to organize and unionize without retaliation.

5   ENSURE TECHNOLOGY PLATFORMS ARE HELD ACCOUNTABLE FOR HARASSMENT, VIOLENCE, DISCRIMINATION, (MIS)DISINFORMATION, AND OTHER HARMFUL CONSEQUENCES OF THEIR CONTENT

A preponderance of evidence produced in the past several years has highlighted the significant harms of the content, algorithms, business models, and (lack of) accountability of social media platforms used regularly by the majority of the U.S public. These harms have had significant consequences for the health, safety, and civil liberties of Black, Latinx, and Native communities. The weaponization of disinformation across social media platforms, specifically targeting Black, Latinx, and Native voters, and aiming to suppress voter turnout, were prevalent during the 2016 presidential election, and continue to proliferate in the current election cycle and impact our democracy. During the COVID-19 pandemic, disinformation targeting Black, Latinx, and Native communities contributed to vaccine hesitation and further impacted the health outcomes of these communities. The algorithms used by social media platforms have been documented to have detrimental impacts on the mental health of teenagers. Social media platforms continue to amplify--and profit from--white supremacist content and that promotes radicalization, extremism, and violence that has been connected to racist, anti-semitic, and islamophobic murders in Buffalo, NY, El Paso, TX, Pittsburgh, PA, and Christchurch, NZ and the January 6th insurrection.

Despite these documented harms, and promises to fight mis/disinformation tech companies have failed to rectify these issues. We are at a critical inflection point where tech platform accountability with an explicit racial justice lens is critical to the health, safety, and civil liberties of communities of color, and to our democracy. We must implement a comprehensive set of strategies as outlined by the Aspen Digital Information Disorder Commission report, including reform of Section 230 of the Communications Decency Act, transparency of content moderation and ad policies, open access of data to researchers, federal oversight, and litigation, among other strategies. In addition to accountability mechanisms to rectify existing harms, proactive strategies must be employed to promote more equitable and just product design, algorithms, and business models that no longer optimize for profit at the expense of truth, safety, security, and our democracy.

6 COMBAT THE HARMFUL CONSEQUENCES OF ARTIFICIAL INTELLIGENCE AND AUTONOMOUS SYSTEMS, AND CREATE STANDARDS FOR THE FUTURE DEVELOPMENT AND DEPLOYMENT OF ARTIFICIAL INTELLIGENCE SYSTEMS

Artificial intelligence (AI), autonomous systems, and the algorithms that drive them are among the most impactful technological advancements in the past century, and have now become ubiquitous in our everyday lives. We encounter algorithms as we utilize search engines, scroll social media feeds, interact with digital voice assistants, and in more consequential areas including policing and surveillance, healthcare, employment, and financial services, impacting economic, health, and safety outcomes. Yet, a recent proliferation of data and research reveals the ways in which algorithms are biased in their design (from utilizing biased or inadequate data sources and the lack of diversity in engineering teams) and have disproportionately harmed individuals and communities of color. Biased algorithms in healthcare restrict the care provided to Black patients; in the criminal justice system have been shown to classify Black defendants as "higher risk" and subject to harsher sentences; in the hiring process, with the use of predictive algorithms (deployed by over 55% of HR professionals), reproduce existing discrimination based on race, gender, and disability status; in the homeownership process have led to the denial of loan applications for Black, Latinx, Native, and Asian applicants, where customers are up to 80% more likely to be denied based on biased algorithms; and biased facial recognition algorithms have led to false arrests of innocent Black people.

The widespread deployment and utilization of artificial intelligence tools, with demonstrated impacts on civil liberties and civil rights, highlight the need for transparency, accountability, and regulation to ensure that the development of future AI systems is done with an ethical and equitable lens--and that harmful products are not deployed. We must quickly and comprehensively implement public policy and private sector solutions, including creating greater transparency for end-users of algorithms, requiring algorithmic audits, providing access to data for researchers to help assess disproportionate impacts on vulnerable populations, and ensuring federal/state/local oversight and accountability to help assess limitations of datasets and establish new standards for improving of future technologies.

7 CLOSE THE DIGITAL DIVIDE THROUGH UNIVERSAL HIGH-SPEED BROADBAND ACCESS AND ADOPTION

The longstanding disparities in access to the broadband connectivity needed to be connected to our digitally-driven world gained renewed attention during the COVID-19 pandemic. An estimated 19M Americans lack access to reliable broadband, and low-income households, tribal and rural communities, and Black and Latinx households are much more likely to be disconnected from the broadband critically needed to learn, work, and thrive. One in three Black, Latinx, and Native families lack high-speed home internet and one in three families who earn less than $50,000 annually lack high-speed home internet. When COVID-19 required a unilateral shift to distance learning, 15M-16M K-12 public school students lived in households without either an internet connection or a device sufficient for remote learning, severely impacting marginalized students. Beyond the lack of access to broadband networks, Black, Latinx, Tribal, and rural communities are less likely to have broadband that is reliable, affordable, and has adequate speed.

Without equitable connectivity, the cascading effects of educational and economic gaps will continue, and the impact will be felt across our nation for generations to come. To close the digital divide, we must support infrastructure investments that expand service options and create new competition that can result in universal coverage, lower prices, faster speeds, and increased reliability across all zip codes to equitably connect Black, Latinx, Tribal, and rural communities; increase investment in targeted subsidies, digital literacy programming, and technology devices; and increase investment in rigorous data collection, data transparency, and accountability on broadband availability and affordability to ensure the areas with the highest need are identified, prioritized, and tracked.

8 INCREASE DEPLOYMENT OF CAPITAL TO DIVERSE STARTUP ENTREPRENEURS, FUND MANAGERS, AND ECOSYSTEM-BUILDING ORGANIZATIONS TO SUPPORT DIVERSITY IN TECHNOLOGY INNOVATION

Within the broader technology ecosystem, venture capital (VC) plays an outsized role in providing startup and growth capital, investing in new products and ideas, and supporting the launching and scaling of technology businesses. In 2021, $330B in venture capital was invested in over 12,000 startup companies based in the United States. Yet, the venture capital and entrepreneurship ecosystem has been overwhelmingly white and male, limiting both innovation and economic opportunity. Just $3.7B in venture capital was invested in Black founders between 2020 and 2021-- with Black technology founders receiving just 1% of all venture capital investment. Latinx founders over the past several years have received just 2% of all venture capital investment, and an even smaller percentage (0.43%) was deployed to Latinx and Black female entrepreneurs. There is also a stark lack of diversity among investors and fund managers deploying capital to startup entrepreneurs, with just 3% of investors being Black and 2% being Latinx. These disparities can be tied to systemic barriers, including long-standing racial wealth disparities and access to friends and family startup capital, and to biases in the pitching process and in investment decisions, insular social networks, and practices including requiring "warm intros" or "pattern-matching."

Given the importance of venture capital in spurring technology innovation, disparities in capital deployment and investment, and the need to invest in a more diverse set of ideas, solutions, companies, and communities, public sector solutions will be critical in addressing disparities and creating systems of accountability in tech entrepreneurship and venture capital. Specifically, we advocate for investment in innovation hubs, accelerator programs, and ecosystem-building organizations focused on Black, Latinx, and Native communities (and co-locating with Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs), and Tribal Colleges and Universities (TCUs)), incentivizing investment in entrepreneurs and fund managers from diverse backgrounds, mandates for portfolio and firm diversity, and data tracking/accountability measures.

9 SUPPORT PROGRESSIVE TAXATION POLICIES THAT ENSURE THE WEALTH CREATED BY TECHNOLOGY COMPANIES IS REINVESTED IN COMMUNITIES HISTORICALLY EXCLUDED FROM THE TECHNOLOGY SECTOR

Racial wealth disparities are directly tied to generations of policies and practices of systemic exclusion from education, employment, loans, and homeownership, and the intentional destruction of thriving Black, Latinx, and Native communities. These disparities are profound, where the median wealth of White families is more than 41 times higher than the median wealth of Black families and 22 times higher than the median Latinx family and subsequently impacts equitable education, health, and employment opportunities. While Black, Latinx, and Native communities have been largely excluded from the wealth creation in the tech sector, tremendous wealth has been created for tech workers, executives, and investors. The largest tech companies (FAANG:Facebook, Amazon, Apple, Netflix, and Google) have a combined market cap of over $5T and the combined wealth of the richest five U.S. billionaires increased from $349B to $743B between 2020 and 2021. Yet, corporate tax rates are the lowest they have been in 40 years, companies like Google, Microsoft, Facebook and Apple have payed little to zero corporate taxes, and the taxation rates of America's richest .01% has decreased by 83 percent since 1953, all of which are linked to further exacerbation of inequality.

Continued reliance on tech companies' charity and statements of commitment to diversity (while spending heavily on lobbying to avoid taxes and accountability) has proven to be ineffective in reducing inequality. Progressive taxation on a share of the richest tech companies and top .01% individuals is needed to provide deep investments in basic social safety nets (education, healthcare, housing) and reduce racial inequality. We must also close tax loopholes and tax shelters, and increase visibility into the tax rates and correlations with inequality. This recommendation must be grounded in the perspective of tech companies having been recipients of the public's tax dollars in R&D investments, contracts, and tax breaks and bearing responsibility to the public and to redress historical disparities. Without a significant change in holding companies accountable to pay their fair share of taxes, we will continue to starve the digital and educational infrastructure needed for an inclusive technology ecosystem to thrive.

ABOUT THE KAPOR FOUNDATION

The Kapor Foundation works at the intersection of racial justice and technology by removing barriers in order to make the technology ecosystem more diverse, inclusive, and impactful for communities of color. The Kapor Foundation is a recognized leader in the movement to transform the technology ecosystem by expanding access to computer science education, conducting research on disparities in the technology pipeline, supporting nonprofit organizations and initiatives, and investing in gap-closing startups and entrepreneurs. For more information on the Kapor Foundation and the Kapor family of organizations, SMASH and Kapor Capital, visit **kaporcenter.org**.

ABOUT THE EQUITABLE TECHNOLOGY POLICY INITIATIVE

The Equitable Technology Policy Initiative articulates a framework for structural change in the technology sector through a set of nine priority policies. Utilizing this framework, the initiative aims to spur broad-based investment in increasing awareness, expanding capacity, and advancing equitable policy change. The Kapor Foundation has awarded over $5.3M in grants to advance the Equitable Tech Policy Initiative's nine policy paradigm and calls on aligned members of the funding community concerned with building a more equitable technology ecosystem to invest in organizations working to increase awareness, expand capacity, and advance policy change across the nine priority areas.

To stay informed about upcoming partnerships, events, and news about the Equitable Technology Policy Initiative, please visit **kaporcenter.org/techpolicy**.

ACKNOWLEDGMENTS