

The ACT Report

————— Action to Catalyze Tech: A Paradigm Shift for DEI —————



Preface

The research findings here represent years of work by experts in the field of Diversity, Equity, and Inclusion (DEI) and business, and have been extensively peer reviewed.

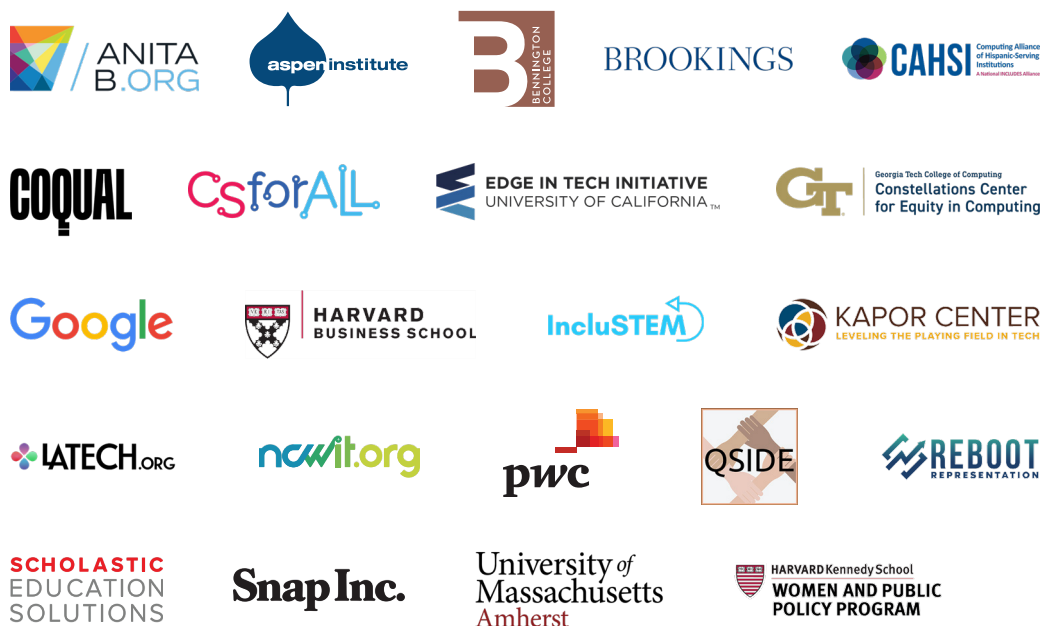
Experts in the Working Group met biweekly for a year to aggregate the most relevant evidence-based approaches that businesses can take to radically improve DEI outcomes.

If DEI is a journey, the ACT Report aims to sit where the rubber hits the road. We know how hard it can be. The good news: there's no need to reinvent the wheel. Instead, we build on findings from dozens of experts and organizations to create a rigorous framework of action.

While this report addresses issues specific to the tech industry, it also provides a road map for businesses of all kinds. Similarly, although we focus where many large tech companies are headquartered—the United States—our message is global. We recognize that different companies are at very different stages in their journey, and one size never fits all. We also know DEI represents an extraordinary opportunity. This report is a call to action during a transformational moment for business ethics and leadership. In 2020, most tech CEOs and leaders—indeed, most businesses—pledged to improve DEI. But real change requires a paradigm shift—newfound courage to change systems and mindsets.

We invite people across the tech sector and beyond to use the tools here to act boldly and collaboratively on the defining issue of our day: equity.

CATALYZE TECH WORKING GROUP MEMBERS*



*Logos represent individual Catalyze Tech Working Group members' organizational and institutional affiliations.

Contents

INTRODUCTION	Executive Summary	5
	An Invitation to Tech Companies	7
	Founding Signatories	8
	Endorsers and Contributors	9
	A Brief History of DEI in Tech (And Why It Failed)	10
	What Should Tech Companies Do?	11
	Paradigm Shift	13
	The Path Forward: Cradle to Career	15

SECTION I:	M.O.S.T. Important Recommendations	20
OUR APPROACH	Systems Thinking	22
	How to Use This Report	23

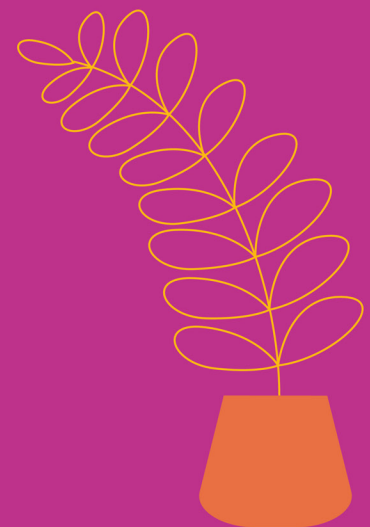
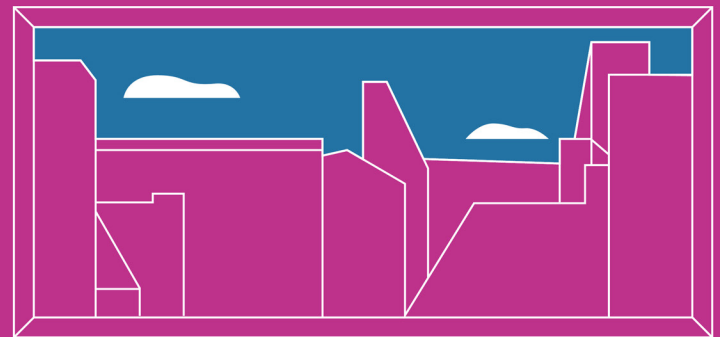
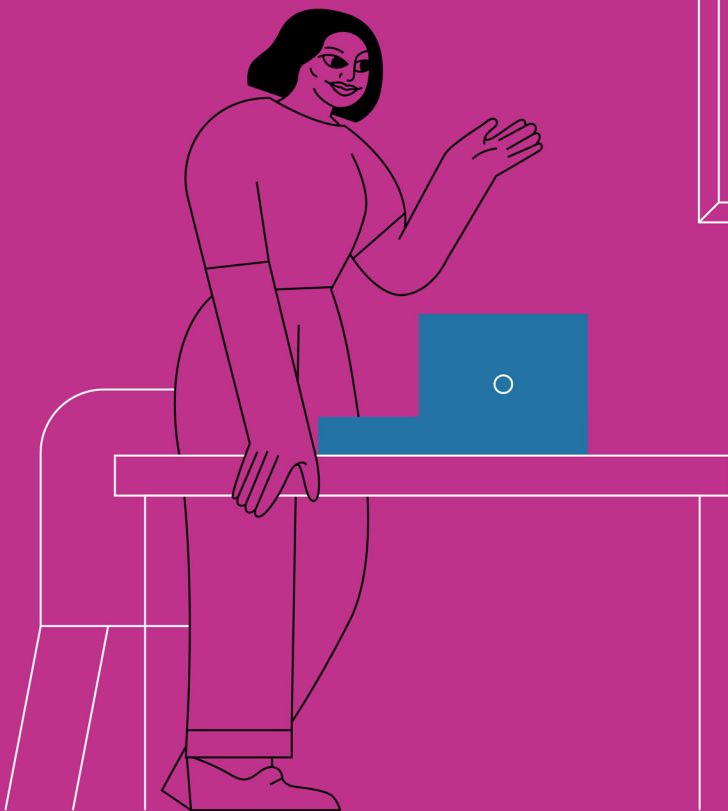
SECTION II:	A Detailed Summary of Recommendations	27
RECOMMENDATIONS	M 1. MODEL AND INCENTIVIZE INCLUSIVE LEADERSHIP	29
	O 2. OPERATIONALIZE DEI THROUGHOUT THE BUSINESS	49
	S 3. SHARE DEI DATA, METRICS, AND GOALS	89
	T 4. TRANSFORM PATHWAYS INTO TECH FOR UNDERREPRESENTED TALENT	107
	Venture Capitalists and Start-Ups	127

SECTION III:	Tech Equity Accountability Mechanism (TEAM)	133
SUSTAINING CHANGE	Requirements to Become an ACT Report Signatory	135

APPENDIX	Acknowledgments	137
	Glossary	139
	A Detailed Summary of Tool Kits	144
	Endnotes	149

Introduction

Executive Summary	5
An Invitation to Tech Companies	7
Founding Signatories	8
Endorsers and Contributors	9
A Brief History of DEI in Tech (And Why It Failed)	10
What Should Tech Companies Do?	11
Paradigm Shift	13
The Path Forward: Cradle to Career	15



Executive Summary

Despite widespread awareness of the lack of DEI in tech and public commitments from tech companies to do better, great uncertainty exists among leaders about how to make real progress.

While there are deep pockets of DEI excellence within tech companies themselves, there has never been an attempt to connect this knowledge in a one-stop shop for people and leaders working across tech, nor has there been an effort to catalyze DEI outcomes through collaborative industry-wide action. DEI can't be solved by one company or leader; it requires long-term collective effort.

The ACT Report calls for a new paradigm in DEI that is holistic, collective, and long-term. Tech's current approach is often dispersed, individual, and short-term. Despite important progress in DEI, tech companies are too often reduced to poaching each other's talent from underrepresented groups. The paradigm shift described in the ACT Report fundamentally requires a shift in thought and behavior. It is based on values, and provides a blueprint to indivisibly link DEI strategy and business strategy. Companies must bring a business approach to inclusion, and an inclusive approach to business. In other words, DEI and business strategies can no longer be separate. The ACT Report explains what this means in practice.

Making the tech industry more inclusive requires a systemic response to a systemic problem. The foundational system that impacts employment opportunity is education. The tech industry, like other industries, must deliver early intervention measures at scale to drive equity from cradle to career. That means tackling educational inequity generally, and increasing access to computer science education specifically.

M.O.S.T. IMPORTANT RECOMMENDATIONS

M 1. MODEL AND INCENTIVIZE INCLUSIVE LEADERSHIP

Change the way you think about DEI, and personally recognize and value it as a business imperative.

O 2. OPERATIONALIZE DEI THROUGHOUT THE BUSINESS

Apply a mindset shift to reimagine, disrupt, and redesign existing structures and systems.

S 3. SHARE DEI DATA, METRICS, AND GOALS

Collaborate with industry peers to align on data collection and reporting. This is the only way to measure and improve progress across the board.

T 4. TRANSFORM PATHWAYS INTO TECH FOR UNDERREPRESENTED TALENT

Meaningfully invest in education, and transform pathways for underrepresented groups.

These recommendations are broken down into 10 actions ([SEE P.20](#) for a summary and [P.27-28](#) for a detailed summary). Whether you're a CEO or manager, educator or advocate, this report seeks to offer inspiration, a road map, and concrete tools. To ensure companies maintain their commitment to DEI, we propose the creation of the Tech Equity Accountability Mechanism (TEAM) to bring together those leaders who want to act and are willing to hold themselves and their companies accountable to accelerate progress.

The CEOs signing up to TEAM agree to meet with a group of experts and stakeholders whose objective is to help tech companies achieve DEI success.

THIS REPORT PROPOSES THREE STEPS FOR TECH COMPANIES AND THEIR LEADERS

- 1. Develop a strategy** to pursue and/or enhance company activity around the four recommendations.
- 2. Become a signatory** to this report by pledging to share data, and publicly report annual progress.
- 3. Support collective action** at an industry level; join conversations to align on DEI data collection, and determine mutually beneficial areas for cross-industry DEI work.

NOTE TO CEOS

Simply handing this report over to the Chief Diversity Officer (CDO) or DEI team, should they exist, is not enough. Leaders must take ownership by:

- Engaging with DEI at a personal (not just personnel) level
- Resourcing DEI
- Establishing accountability mechanisms and rewards

LOOKING AHEAD

We call for urgency because, despite pockets of excellence, tech's progress on DEI remains agonizingly incremental. All companies can do more to prioritize DEI. The ACT Report represents an unprecedented effort to transform DEI in tech. But it's only a start. With a clear blueprint in hand, it's now up to individual leaders and teams across the tech industry to come together and begin the hard work of turning collective intention into action.

An Invitation to Tech Companies

Tech companies did not create the underlying racial and social inequities revealed by their own workforce data, and gravely compounded by a global pandemic. However, given the increasingly important role technology plays in people's lives, tech companies have a unique capacity and responsibility to drive real change.

Tech is a microcosm of our country's broader dichotomy: America is a land of opportunity, yet continues to grapple with systemic racism.*

The murder of George Floyd in Minneapolis on May 25, 2020, sparked Black Lives Matter protests on every continent and exposed historic bias in systems of all kinds. This racial reckoning came soon after the 2018 #MeToo movement exposed global, widespread gender bias in the workplace. Both movements demonstrate that dramatic change is often inspired by those far outside the C-suite. And yet, since those watershed events, much of the initial enthusiasm and support for change has faded. In some cases, there has even been a backlash. At the same time, corporate leaders have not been held accountable for the pledges they made to advance equity. At this crucial moment, when the possibility of progress hangs in the balance, the ACT Report invites equity advocates everywhere—from CEOs to interns and everyone in between—to ask what they can personally and collectively do to promote equity.

This report does not set out to make the business case for DEI. We take that as a given: widening the talent pool, reducing the skills gap, and creating a diverse workforce to engage the global economy are all prerequisites for successful 21st century businesses. Instead, we call for a radical paradigm shift, based on values, that makes DEI strategy and business strategy indivisible.

Companies must bring a business approach to inclusion, and an inclusive approach to business.

DEI and business strategies can no longer be separate.

*Systemic racism refers to how the practices, policies, behaviors, and norms that perpetuate racial inequity and racism are baked into systems themselves. This isn't about individuals behaving in racist ways. It is about how even well-meaning people end up participating in systems that are inherently racist. It is a structural problem that requires a structural solution. [SEE GLOSSARY](#) for more info.

Founding Signatories



MEMBER COMPANIES:

Applied Materials, Dell Technologies,
Equinix, Intel, Micron Technology,
Nasdaq, NTT Data, Snap Inc., TEL US

Endorsers and Contributors

“For a long time, it has been clear that individual company actions are insufficient to drive the kind of systemic changes needed to truly make the tech industry more inclusive and accessible to young people of color and other underrepresented groups. While this is not the first industry-wide effort, it is the first to rally so many major tech leaders in support of industry-wide standards, data transparency and accountability, and policy advocacy. We are proud to support these recommendations, and we both look forward to working with this coalition and holding them accountable for achieving their goals.”

DERRICK JOHNSON
PRESIDENT AND CEO, NAACP



“The ACT Report’s focus on advancing equity, industry-wide standards, and accountability in the tech sector is closely aligned with the aims of AnnenbergTech and Pledge LA to elevate untapped talent from underrepresented communities. As we’ve seen in our work in Los Angeles, forging pathways to opportunity requires leadership — and action.”

CINNY KENNARD
EXECUTIVE DIRECTOR, ANNEBERG FOUNDATION



“Big Tech needs major change because the destructive impact of its products on Black people and other exploited and neglected groups needs to end. Diversity can transform the tech sector by transforming the way it does business, and this report is one of very few that makes that connection — demonstrating the impact of diversity on both the business model and workplace equity, not just on public image. Taking diversity seriously, in the way this report does, is a critical step to taking social responsibility seriously. When matched with strong internal policies, faithful enforcement, the right performance incentives, and a culture grounded in honesty, transparency and responsibility, this type of approach to diversity can have a profound effect on consumer protection and social impact. The path from real solutions to commitment to real action, implementation and impact is one that every technology corporation should be on.”

RASHAD ROBINSON
PRESIDENT, COLOR OF CHANGE



“The ACT Report represents an invaluable contribution in the DEI space. By first assessing what hasn’t worked in the past, it helps create the space for the next wave of more integrated and deeper efforts to take off.”

SARAH STEIN GREENBERG
EXECUTIVE DIRECTOR, STANFORD D.SCHOOL

CONTRIBUTING ORGANIZATIONS



SEE ACKNOWLEDGEMENTS for a complete list of individual contributors, consultants, and peer reviewers.

A Brief History of DEI in Tech (And Why It Failed)

DEI in tech has largely failed, but that doesn't mean that no progress has been made or that future progress is impossible.

We summarize here why making headway on DEI has proved so hard. Awareness around DEI grew exponentially in 2014, when tech companies started publishing workforce representation data. But awareness didn't solve the problem because:

- Publishing data became the “end” instead of the “means,” and simply normalized the status quo.
- Even when leaders and teams wanted to act, they often lacked clarity about where to start.
- An absence of team-level DEI data made tracking and measuring success difficult.
- A lack of accountability meant that while the problem was huge, no one owned it.
- DEI teams historically had little authority and sat many layers below the C-suite.
- Sensitivities around DEI have often made C-suite leaders wary to take big bets—or any bets.
- Companies relied on piecemeal diversity solutions rather than systemic, cultural, multipronged, research-based change efforts.¹
- Companies focused on “fixing” groups of excluded people by encouraging them to eliminate their differences—e.g., coaching women to be more like men, or people of color to be more like White majority groups—instead of focusing on fixing biased systems.
- Majority groups were unaware of the extent of barriers, systemic bias, and daily struggles faced by underrepresented groups.

The above factors have been compounded by a critical deficit in *inspiration*. DEI traditionally has taken a “compliance-based” approach, failing to intrinsically motivate and inspire the majority while, ironically, stigmatizing underrepresented groups.

After years of unsuccessful DEI efforts by companies across numerous industries, DEI experts understand much of what works and what doesn't.

Today we call for an approach that inspires people—and, in particular, majority groups—to motivate themselves to find innovative DEI solutions.

What Should Tech Companies Do?

This report sets out four recommendations, supported by 10 actions that tech companies can take ([SEE P.20](#)). If the tech industry wants to stop failing at DEI, it must change its own culture, reduce high attrition rates of underrepresented groups who leave more quickly than they arrive,² and collectively tackle the underlying root causes that lock underrepresented groups out of the industry at an early age.

We call on tech companies—indeed, *all* companies, especially those with a technical workforce—to:

- **Use the recommendations** in this report to embed DEI strategy into the heart of their business plan.
- **Model and incentivize inclusive leadership.** CEOs and leaders must go deep on what that means for them personally, and bring their voices to this issue.
- **Remove bias from hiring systems** where present, and extend hiring beyond elite universities. The talent is out there now—they just may not have four-year degrees from prestigious schools.
- **Share DEI data, metrics, and goals.** CEOs and leaders should support industry-wide DEI reporting standards, share anonymized and aggregated data, and set public goals.
- **Come together as an industry** to urgently create new pathways into tech, building on the pockets of deep excellence that already exist in tech companies, like the career certificates recently launched to provide flexible online training to those without formal qualifications.³
- **Redouble efforts to provide all children with computer science education**—not just those with the best K–12 education. Most people are locked out of tech not as adults, but as children, in part because they lack a strong foundation in math.

We recognize that it's hard work for businesses to create a level playing field, and a wealth of data implies that no one has yet succeeded.⁴ That's why companies should join forces to make a difference.

Corporate systems must be intentionally redesigned to root out bias and drive equity. This report explains in detail what that actually means.

Yet changing systems alone is not enough. Companies must change how people *behave* within those systems. This requires deep introspection on the part of all team members—individually and collectively—and goes far beyond a perfunctory two-hour course on unconscious bias.

Despite poor outcomes so far, we assume good intent on the part of tech companies and leaders. We believe they fully understand the case for a more diverse workforce, a more inclusive culture, and more inclusive products. To turn intentions into impact:

CEOS AND C-SUITE

must resist delegating leadership on DEI to others. Leaders must invest in their DEI expertise, as well as their team members, and empower and professionalize the DEI function.

LEADERS THROUGHOUT THE BUSINESS,

including middle managers, must learn the practicalities of embedding DEI at the heart of their business plans.

EMPLOYEE RESOURCE GROUPS (ERGS)

and other equity advocates across the whole team must feel empowered and rewarded to lead and innovate.

When it comes to DEI, underrepresented groups have often been left to “do the work.” Expecting underrepresented groups at the margins of power—whether women, LGBTQ+ communities, Black, Indigenous, people of color, people with disabilities, or those with the least wealth—to overturn the status quo is an exercise in futility that also adds insult to injury. If one sentence can sum up the task, it’s this:

Companies must successfully mobilize majority groups to champion equity, because DEI is everyone’s job.

This calls for leadership across an entire organization, which in turn calls for a paradigm shift.

Paradigm Shift

A true paradigm shift first requires a mindset shift. In DEI, this happens when people transform an intellectual understanding of inequity into a deeper understanding of the history and lived experience of underrepresented groups.

For example, before George Floyd's murder, many White people intellectually understood racism and were aware that Black people die at the hands of police at a higher rate than White people. But while the majority believed this was wrong, they were not moved to act. However, the impact of watching George Floyd plead for his life was profound, transforming an intellectual understanding of racism into an overwhelming moral compulsion to act. The Black Lives Matter protests that followed across the U.S. comprised 54% White people, and 21% Black people, a level of majority-group engagement on behalf of the Black community never seen before—not even during the Civil Rights Movement.⁵

54% of the Black Lives Matter protesters were White, a level of majority-group engagement never seen before.

We ask CEOs and tech leaders across the industry who share this moral compunction to act to create a new paradigm that is holistic, collective, and long-term. Tech's current paradigm is often dispersed, individual, and short-term. Put simply, tech companies often poach each other's talent from underrepresented groups. This is the HR equivalent of rearranging deck chairs on the Titanic. It is why so many DEI efforts sink without a trace—they only manage to redistribute the existing diverse tech talent in a zero-sum game rather than tackle the underlying problems and increase the supply.

Individual companies must take action to root out, where present, systemic bias in their own organizational cultures and systems, but this alone will never move the needle on representation. Industry-wide action must address deep-rooted systemic barriers that impact sourcing and supply.

Moreover, a paradigm shift must combine multiple elements. Data alone is not enough. Accountability alone is not enough. Leadership alone is not enough. Above all, *diversity* alone is not enough—it doesn't work to just "add diversity and stir." A November 2020 *Harvard Business Review* article argues that,

"increasing demographic diversity does not, by itself, increase effectiveness; what matters is how an organization harnesses diversity, and whether it's willing to reshape its power structure."⁶

Another way to approach this challenge is through the concept of belonging,⁷ which is increasingly used to frame DEI.

In summary, a holistic approach requires the combination of leadership, values, data, accountability, diversity, empowerment of underrepresented groups, long-term commitment by majority groups, as *well* as a mindset shift. Countless companies have found that a siloed approach leads to failure. If a company successfully combines all these factors, the resulting paradigm shift creates a high chance of success.

THE RELATIONSHIP BETWEEN INCLUSION AND BELONGING⁸

Inclusion is when space is made within an existing institution for members of excluded groups, and the onus of adapting to the new environment is on the new arrivals.

Belonging occurs when people have a stake or say in the construction or reconstruction of that institution, structure, group, or community. They share a level of responsibility, power, agency, and care for the institution and are valued, seen, and heard. It is this process of co-creation and full participation that creates the feeling of belonging.

The work of belonging is critical in a multiracial, multiethnic, diverse country like the United States, where we need a new story free of domination and othering. Using the language of belonging allows you to serve the needs of targeted groups while focusing on universal goals. And while words like *diversity* and *inclusion* can be misinterpreted (often in bad faith to pit groups against each other and compete for resources), everyone can find themselves in belonging. More than a buzzword, belonging can be a robust operations, management, and communications strategy and practice to help you engage all groups and effectively achieve your DEI goals.



IMAGE SOURCE:
Othering & Belonging
Institute at UC Berkeley.

The Path Forward: Cradle to Career

The ACT Report asks companies to apply a **SYSTEMS THINKING APPROACH** to DEI. Systems thinking requires us to analyze events and patterns of behavior over time,⁹ and then identify “high leverage points”—the areas that will drive the greatest change. Systems thinking recognizes the interconnectedness across multiple systems and is particularly relevant when problems are infinitely larger than any single business or industry. Critically, even when members of underrepresented groups make it into tech careers, they face marginalization and institutional barriers to their success once they get there. Companies must therefore prioritize actions to build more inclusive cultures internally.

Take systemic racism. It’s alive and well in America (and globally), as illustrated by the fact that racial segregation in U.S. schools is worsening.¹⁰ So is gender inequality, which has long been endemic.¹¹ Recent research demonstrates that women with straight As in high school have the same leadership prospects as men with failing grades.¹² And at the “top ten” universities in America, more students are drawn from the top 1% of the income scale than the bottom 60%.¹³

We can see how multiple systems failures can lead to inequitable outcomes. For example, infrastructure in Indigenous communities is underfunded, especially on rural reservations. 53% percent of Native Americans with a computer living on Native American reservations or other tribal lands have no access to high-speed Internet.¹⁴ Exposure to tech careers in many Indigenous communities is mostly absent. All of this makes it less likely that young Indigenous peoples will have the opportunity to pursue tech.

Clearly, our society is far from a meritocracy.¹⁵ Systemic racism and sexism are layered over systemic poverty, and all these inequalities have been worsened by the COVID-19 pandemic.¹⁶ Moreover, income inequality in the U.S. is growing sharply, and is higher than in peer countries. These factors combine with other aspects of identity, such as sexual orientation and disability, to keep certain groups out of tech.

THE IMPORTANCE OF PRESCHOOL AND K-12 EDUCATION

Taking a systems thinking approach to DEI starts with the most foundational system: education. Education should be the great equalizer—an opportunity for everybody, no matter their race, gender, income, or background, to realize their potential. In reality, from the earliest years, educational systems are plagued with inequity. We believe the solution starts with early intervention measures. For the purposes of this report, we focus on education from elementary school to postsecondary opportunities (K–12 and postsecondary in the U.S.). But we believe, as does a bipartisan majority of U.S. voters,¹⁷ that government should proactively support early education/preschool programs.¹⁸

Research demonstrates that quality preschool improves student outcomes in math and reading later in life, and also narrows achievement gaps that appear before children reach preschool age.¹⁹ As American students struggle to compete with students from around the world, there's a clear business and moral case for quality preschool programs in a competitive global economy.²⁰

The high leverage points we identify in U.S. K–12 education tackle root problems around access to quality computer science (CS) education. The data suggests the race gap is bigger than the gender gap. To increase the number of Black and Hispanic/Latinx students graduating with CS degrees, we must focus on access to eighth and ninth grade algebra (which, in itself, relies on factors such as access to quality early education/preschool).²¹ If we want to disrupt the school-to-prison pipeline,²² and transform it into a school-to-tech pathway, then we must ensure that every student has the fundamental math and science background to study CS.

CASE STUDY: ATLANTA PUBLIC SCHOOLS

The Atlanta Public Schools system illustrates many of America's major challenges, ranging from profound income inequalities exacerbated by gentrification, to entrenched racial segregation in education and housing. Although Atlanta Public Schools serve both Black and White children, the schools are largely segregated. The science, technology, engineering, and math (STEM) education outcomes cut by race—which determine whether children can choose a STEM career—are devastating.

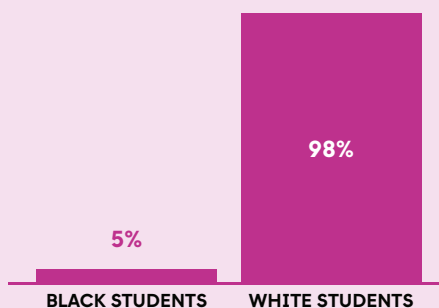
Companies can help reduce income inequality by helping to build high-quality education systems that break the link between race, socioeconomic background, and educational achievement. That's why this report calls on tech companies to support legislation and policy measures that increase funding for public education generally, and CS education specifically, as well as other evidence-based reforms.

But even if we can increase access to eighth and ninth grade algebra, another fundamental barrier currently makes CS education for all children impossible: a critical shortage of CS teachers. In 2017, of the 150,000 new teachers who graduated in the United States, only 110 were CS teachers. This is a perfect example of a high leverage point where the tech industry and interested philanthropists can act collectively, in partnership with government, to create a systemic solution that tackles a root problem.

Take two middle schools in Atlanta, one serving predominantly White students and one serving predominantly Black students.

The number of children graded as proficient in algebra at the end of eighth grade is 5% for Black children, and 98% for White children. (White girls score 99% and White boys score 97%).²³

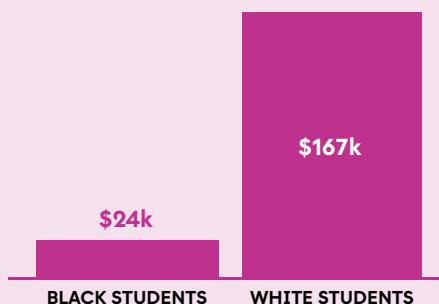
FIG 1. EIGHTH GRADE ALGEBRA PROFICIENCY



Income inequality is immense.

The average Black student in Atlanta has parents who earn \$24k per annum. The average White student in Atlanta Public Schools has parents who earn \$167k per annum.²⁴

FIG 2. AVERAGE ANNUAL PARENT INCOME



* It is important to note, however, that income inequality does not supplant racism as an explanation for racial disparities. Data shows, for example, that "Black boys raised in America, even in the wealthiest families and living in some of the most well-to-do neighborhoods, still earn less in adulthood than white boys with similar backgrounds;" as reported by [The New York Times](#).

A CALL TO ACTION

We call for a coalition to solve the acute lack of computer science (CS) teachers, and to fund endowed centers of excellence for CS teaching in colleges that will create the largest number of Black and Hispanic/Latinx CS teachers. With the launch of the ACT Report, we announce that \$20 million has been pledged, and four agreements with teaching colleges are underway.

Companies are invited to direct some of their philanthropic giving toward this specific initiative to create meaningful and lasting systemic change.²⁵

SUMMARY

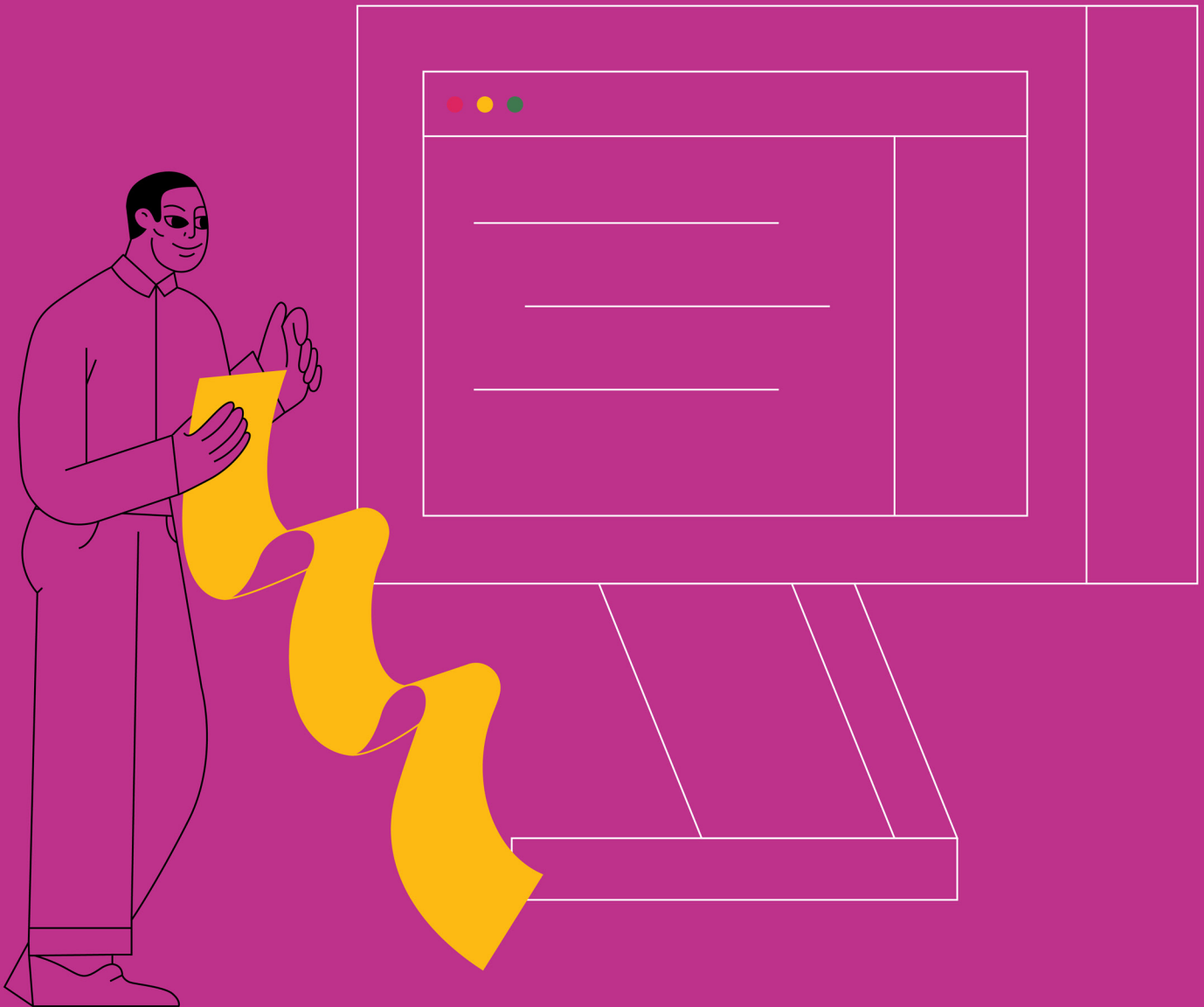
Progress is not linear or guaranteed, and requires people with moral conviction to work together. Underrepresented groups cannot solve the challenge of DEI alone, and neither can leaders. But leaders must combine their moral compass and business acumen to step up—both for their individual companies, and collectively for their industry. When leaders take personal responsibility for this issue, they send a clear signal of its importance to the rest of the organization.

We ask leaders to fully embrace the critical personal role they must play if good intentions are to drive good outcomes.

This report draws on wide-ranging research to break down big daunting tasks like changing culture, shifting mindsets, and embedding inclusion principles across HR systems and, equally important, within product development. Although building equity into an organization is a deeply complex task, this report aspires to provide clear guidance. We trust that all those who want to create a fairer tech industry—and society—will step up to work collectively as leaders in the DEI space.

Our Approach

M.O.S.T. Important Recommendations	20
Systems Thinking	22
How to Use This Report	23





Important Recommendations

1. Increase your personal DEI expertise.
2. Establish DEI as a business imperative.
3. Support DEI with funding, metrics, strategies, and accountability.
4. Redesign systems, including hiring, retention, and promotion systems, to remove bias.
5. Apply both a DEI framework and an ethical framework to the design of products and services.
6. Support industry-wide DEI reporting standards and share anonymized data.
7. Set public goals.
8. Advocate for computer science (CS) to be required in all schools.
9. Build systems capacity to create more CS teachers at all levels, and invest in CS faculty within colleges of education.
10. Invest in organizations that connect talent from underrepresented groups to tech careers.

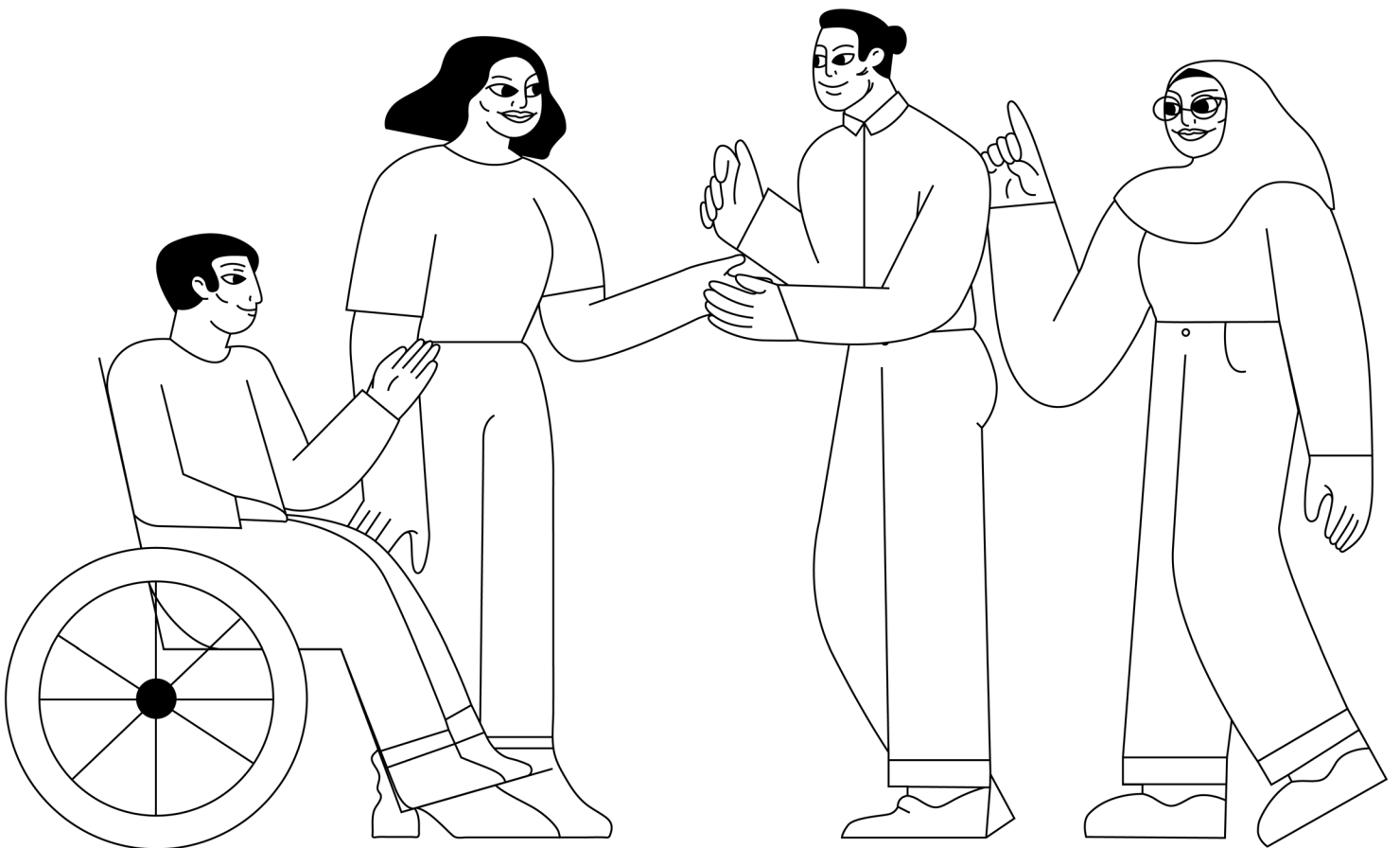
To ensure companies maintain their commitment to DEI,

we recommend the creation of industry-level organizations to foster collaborative work between leaders and drive accountability.

For the tech industry specifically, we propose the [TECH EQUITY ACCOUNTABILITY MECHANISM](#) (TEAM)—an initiative developed by the Aspen Institute with support from BSR—to bring together those leaders who want to act, and are willing to hold themselves and their companies accountable to accelerate progress.

Companies signing up to TEAM agree to meet annually with a group of experts and stakeholders whose objective is to help tech companies achieve DEI success.

For more information on TEAM, [SEE PAGE 133](#).



Systems Thinking

Systemic problems require systemic solutions. Systems thinking is a practice that creates systemic solutions.

It requires us to identify events and patterns of behavior over time, the underlying structures that drive them,²⁶ and the high leverage points that will have the maximum impact to change them. Problems that respond best to systems thinking have the following characteristics:²⁷

- The issue is important.
- The problem is chronic, not a onetime event.
- The problem is familiar and has a known history.
- People have unsuccessfully tried to solve the problem before.

The problem this report seeks to address—systemic inequity in the tech industry—is important, chronic, and very familiar. People have repeatedly tried to solve it, and widespread failure has been regularly reported. Systems thinking is growing increasingly popular as a foundational approach to solving business problems by looking beyond the traditional toolbox. As one management consultant writes,

“A carpenter looks for a nail to fix a problem, and an accountant reaches for their calculator. As a business manager, you don’t want to have such a narrow, department-specific focus on resolving issues.[...] Instead, you need to take a step back and look at the entire ecosystem and gain a transdisciplinary understanding of the system.”²⁸

For tech to succeed at DEI, the whole industry needs to take a step back and look at the entire ecosystem. While this may feel daunting, there are many introductions to systems thinking²⁹ that teams and leaders can use, as well as high-quality, free, in-depth courses. For example, see the “Systems Practice” syllabus offered by Acumen Academy and supported by Pierre Omidyar, founder of eBay.³⁰ Anyone can learn how to apply a systems thinking approach to their work. What we don’t yet have is an example of an *industry* applying systems thinking to their work. We call on tech leaders to come together to initiate such an approach.

How to Use This Report

While the ACT Report is directed at the tech industry, it is suitable for anyone wishing to take action on DEI. You don't need a title to be a leader—but you do need a plan.

The ACT Report provides a rigorous framework of action and lays out practical steps to tackle root causes of exclusion. Different companies are at very different stages in their journey, as are different industries, and one size never fits all. But it's as important for the CEO of a start-up to think about DEI as it is for the CEO of a tech company with over 100,000 employees. We also invite those without a C-suite title to be equally engaged; equity advocates can take the recommendations in this report and modify/customize them as necessary. Throughout this report, we use icons to indicate which recommendations are specifically for CEOs, CDOs, start-up founders, and others, as we know that the implementation of some actions may be limited by resources, size of company, scope of influence, or function/role. We encourage you to use this report as a guide, tool kit, and source of inspiration.

CHANGE AGENTS



This report aims to build on the work of numerous experts and practitioners. Resources and tool kits are available to help companies implement many of the suggested actions and recommendations. These are linked with attribution throughout the report and can also be found in the [APPENDIX](#).

For leaders, simply handing this report to the Chief Diversity Officer (CDO) or DEI team, should they exist, is not enough. Leaders must take ownership of this issue in three key steps:

1. Engage with DEI at a personal (not just personnel) level.
2. Resource DEI (e.g., appoint a DEI leader/CDO, empower a DEI team, financially incentivize leaders, allocate necessary budget).
3. Establish accountability mechanisms and rewards.

THESE RECOMMENDATIONS WORK TOGETHER

M 1. MODEL AND INCENTIVIZE INCLUSIVE LEADERSHIP

Asks you to change the way you think about DEI, and to personally recognize and value it as a business imperative.

O 2. OPERATIONALIZE DEI THROUGHOUT THE BUSINESS

Explains how to operationalize and apply that mindset to your business to reimagine, disrupt, and redesign existing structures and systems.

S 3. SHARE DEI DATA, METRICS, AND GOALS

Explains how to collaborate with your peers and come together as an industry to align on data collection and reporting.

T 4. TRANSFORM PATHWAYS INTO TECH FOR UNDERREPRESENTED TALENT

Asks you to change the future face of your industry by meaningfully investing in the education system, and transforming pathways into your industry for underrepresented groups. We detail what this means specifically for the tech industry.

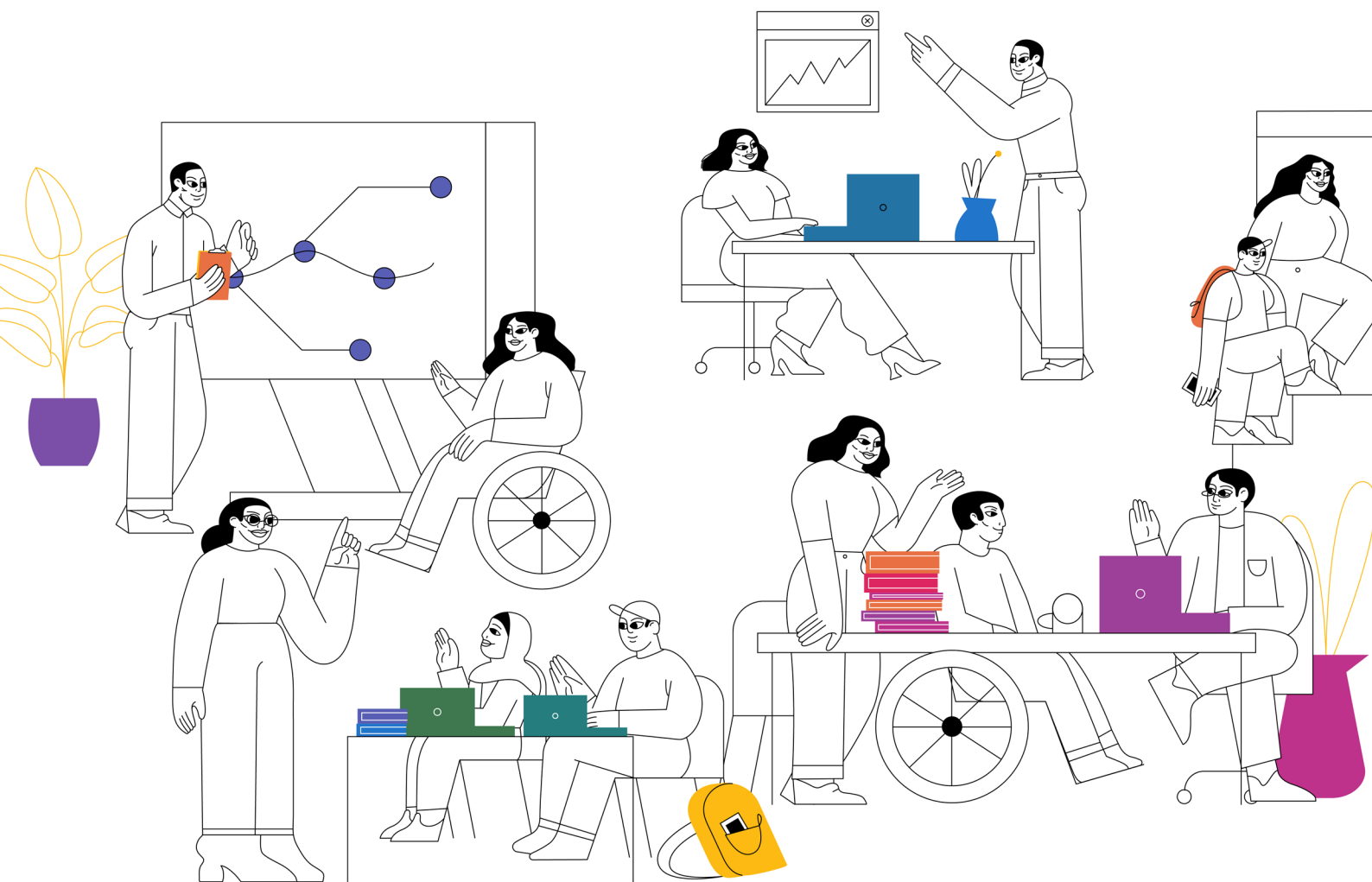
A NOTE ON TERMINOLOGY

When we refer to “underrepresented groups,” we are referring to groups historically excluded from the U.S. tech industry, and those underrepresented in the industry relative to their size in the general population. This includes, but is not limited to, people who identify as women, nonbinary, LGBTQ+, veterans, people with disabilities, first-generation college students, and some racial/ethnic groups including Black, Hispanic/Latinx*, and Indigenous peoples. Generally, Asian communities are not considered underrepresented in tech, but this generalization fails to account for certain subgroups (e.g., Hmong, Laotian, Cambodian, Bangladeshi, etc.). Overall, Asian communities are significantly underrepresented in leadership, and underrepresentation differs based on location. For example, although Asian communities (like White people) are overrepresented in U.S. tech, they are underrepresented in tech in the UK and Europe. However, even groups that are not considered underrepresented in tech can be marginalized (i.e., subject to stigma, disrespect, stereotypes). Leaders and organizations must change the experience of both underrepresented *and* marginalized groups to create a truly inclusive culture.

*The ACT Report uses the term Hispanic/Latinx, except when quoting other people's work. Hispanic refers to people with Spanish-speaking origins. Latino/a historically refers to people from Latin America. However, Latinx has grown in use and acceptance as the gender-expansive term for people from this region, as it is inclusive of transgender and nonbinary individuals. Hispanic does not include Latin Americans of Portuguese origin or Portuguese speakers (e.g., Brazilians). Some Hispanic/Latinx people find the term Hispanic problematic due to Spain's colonial history.³¹ While there has been growing use of the term Latinx among younger and LGBTQ+ communities, the vast majority of Hispanic/Latinx Americans today refer to themselves as Hispanic.³²

Recommendations

A Detailed Summary of Recommendations	27
M 1. Model and incentivize inclusive leadership	29
O 2. Operationalize DEI throughout the business	49
S 3. Share DEI data, metrics, and goals	89
T 4. Transform pathways into tech for underrepresented talent	107
Venture Capitalists and Start-Ups	127



A Detailed Summary of Recommendations

M 1. Model and incentivize inclusive leadership

ACTION 1. Increase your personal DEI expertise.

- 1.1. Allyship is not a state; it's an ongoing action. Make time for the personal reflection and engagement that sustains allyship.
 - 1.2. Interact personally and on an ongoing basis with employees from underrepresented groups and Employee Resource Groups (ERGs).
 - 1.3. Model a growth mindset.
 - 1.4. Disrupt everyday biases that subtly but repeatedly harm people from underrepresented groups.
 - 1.5. Give personal signals that you're an inclusive leader.
-

ACTION 2. Establish DEI as a business imperative.

- 2.1. Include DEI as a core company value and annual priority. Ensure each C-suite leader's business plan has DEI objectives on representation, culture, and, where applicable, product.
- 2.2. Elevate the role of Chief Diversity Officer (CDO) to ensure they have adequate authority, training, and resources to influence the C-suite.
- 2.3. Apply the same risk tolerance to DEI as to product innovation.
- 2.4. Devote part of one board meeting and, ideally, part of one quarterly earnings call to DEI challenges and progress.
- 2.5. Prioritize DEI in your company's spending strategy through intentional partner, vendor, and supplier diversity policies.

O 2. Operationalize DEI throughout the business

ACTION 3. Support DEI with funding, metrics, strategies, and accountability.

- 3.1. Create DEI data infrastructure to equip teams and leaders with data to make informed decisions, define strategy, and track progress.
 - 3.2. Set internal goals and track implementation of strategic actions (best practice requires goal setting at entry-level, mid-career, and leadership levels).
 - 3.3. Create incentives for C-suite leaders, managers, and others to achieve DEI goals.
 - 3.4. Direct a pay audit for underrepresented groups, starting with gender and race, to close gaps.
-

ACTION 4. Redesign systems, including hiring, retention, and promotion systems, to remove bias.

- 4.1. Invest in middle managers' success, train them to be inclusive leaders, then hold them accountable for meeting DEI goals.
- 4.2. Design recruiting and interview systems to drive out bias.
- 4.3. Design talent development, feedback, and promotion systems to minimize bias and reward inclusion.
- 4.4. Reduce bias in task assignment and work allocation. Introduce a process to spread stretch assignments beyond favored groups.
- 4.5. Improve sponsorship, allyship, and mentorship opportunities, and ensure the opportunities you personally provide are balanced among different communities.
- 4.6. Use ERGs to support employee development, create community, and contribute to business objectives, but not as a substitute for a DEI strategy.
- 4.7. Evaluate what works and what does not, and iterate accordingly.

ACTION 5. Apply both a DEI framework and an ethical framework to the design of products and services.

- 5.1. Develop product inclusion principles and operationalize them throughout the product development process.
- 5.2. Prioritize accessibility in your products.
- 5.3. Address potential bias in your artificial intelligence (AI) and machine learning (ML) technology.
- 5.4. Consider how your company can mitigate harm from the application of your technology.
- 5.5. Increase representation and disrupt stereotypes in your original content, marketing, and advertising.

S 3. Share DEI data, metrics, and goals

ACTION 6. Support industry-wide DEI reporting standards and share anonymized data.

- 6.1. At a minimum, commit to collecting, tracking, and publishing intersectional data on representation, hiring, and attrition.
- 6.2. Disaggregate baseline metrics by function and level, and align on definitions to ensure apples-to-apples comparison.
- 6.3. Expand demographics beyond Equal Employment Opportunity Commission (EEOC) categories (including intersectional data) through self-ID surveys.
- 6.4. Leverage surveys to measure inclusion and employee sentiment.
- 6.5. Share anonymized DEI data with an industry body that will support standardization of DEI data collection.

ACTION 7. Set public goals.

- 7.1. Analyze your company's DEI data to identify discrepancies and gaps.
- 7.2. Select meaningful benchmarks to determine whether goals are realistic on any given metric.
- 7.3. Ensure goals are challenging to motivate meaningful progress.
- 7.4. Ensure goals are SMART.
- 7.5. Incentivize goal attainment.

T 4. Transform pathways into tech for underrepresented talent

ACTION 8. Advocate for computer science (CS) to be required in all schools.

- 8.1. Partner with the Expanding Computing Education Pathways (ECEP) Alliance to initiate and support state and district-based policy reform to improve CS education.
- 8.2. Encourage increased local, state, and federal investment in educational equity, CS educational policies, and well-prepared teachers.
- 8.3. Leverage site selection for business expansion to drive investment in K–12 CS funding.

ACTION 9. Build systems capacity to create more CS teachers at all levels, and invest in CS faculty within colleges of education.

- 9.1. Create CS education capacity in the schools that prepare teachers.
- 9.2. Advocate for and support teacher certification in colleges of education.
- 9.3. Prepare existing teachers to teach CS.
- 9.4. Work at an industry level to retain CS teachers.

ACTION 10. Invest in organizations that connect talent from underrepresented groups to tech careers.

- 10.1. Increase support for building technical talent pools for your workforce by promoting systemic reform and funding students from underrepresented groups at institutions of higher education.
- 10.2. Establish relationships with institutions that graduate Native American, Black, and Hispanic/Latinx students. Promote opportunities for paid internships, "sprinternships," and apprenticeships with your company.
- 10.3. Fund intermediary programs and organizations to help build pathways into tech for students from underrepresented groups.

Model and incentivize inclusive leadership



The tech industry unnecessarily loses talent every day. People from underrepresented groups leave the industry earlier and at faster rates than people in majority groups. Those who stay are less likely to get promoted to management and leadership positions.³³

CEOs and leaders are ultimately responsible for company culture. To foster an inclusive culture, they first need to understand how they can be inclusive leaders. Inclusive leadership is a skill that must be developed and rewarded (e.g., as part of a company’s performance review process). Tech CEOs and leaders must model inclusive leadership for their organization’s senior team and managers at every level. How leaders prioritize diversity, speak about talent, and reward or sanction behavior is what establishes—and can reset—company norms. Changes at the top flow down and influence the behavior of other leaders, middle managers, and hiring managers who, in turn, translate company norms into hiring practices, interview behavior, and decisions.

Leadership in tech is predominantly made up of White men. The industry has a well-documented “bro” culture,³⁴ and a poor track record of building inclusive workplaces.³⁵ Underrepresented groups such as women, people of color, nonbinary people, and others can sometimes face high levels of hostility. According to a survey by Project Include, since the beginning of the pandemic, tech workers have reported experiencing higher levels of harassment based on gender, race, and age.³⁶

Inclusive leaders don’t try to “fix” people from underrepresented groups so they assimilate into a system. Instead they reform biased systems to make them work for everyone. This is complex, organizational work that includes changing the environment and culture, redirecting resources, and inspiring majority group allies.

It is essential that leaders invest time in developing their own DEI expertise so they can set norms and expectations for success. An inclusive culture won’t happen without visible, persistent engagement by the CEO and the C-suite, who can model inclusive leadership. A CEO can and must partner with DEI professionals, but ultimately cannot delegate leadership on inclusion to DEI teams.

ACTION 1



Increase your personal DEI expertise.

ACTION 2



Establish DEI as a business imperative.

HIGH LEVERAGE POINTS FOR MODELING AND INCENTIVIZING INCLUSIVE LEADERSHIP

CEOS McKinsey & Company developed what is known as an influence model to help leaders manage large-scale organizational change. The model focuses on four building blocks of change: role modeling, fostering understanding and conviction, developing talent and skills, and reinforcing with formal mechanisms.³⁷ Translated into action on DEI, tech CEOs must help their teams understand the problem by ensuring that everyone can talk about it using a shared language and vocabulary; encourage open discussion of bias; and support the recognition of potential and actual instances of bias. They must also use tools, procedures, processes, and structures to increase accountability for DEI results and reduce the conditions that allow unconscious bias to override good intentions.³⁸

C-SUITE LEADERS C-suite leaders are similar culture carriers to CEOs and should be able and expected to demonstrate the same inclusive leadership that we're asking of CEOs. C-suite leaders have more influence and, as such, more responsibility to actively improve DEI outcomes in their specific organizations. Unlike CEOs who must stay focused on the company's big picture, C-suite leaders can take a more granular approach to hiring, progression, and attrition. C-suite leaders have a particularly critical role in the implementation of metrics and measurements, described in more detail in Recommendations 2 and 3.

WHAT IS INCLUSIVE LEADERSHIP?

Juliet Bourke and Andrea Titus of Deloitte identify six traits of inclusive leaders:³⁹

<p>VISIBLE COMMITMENT</p> <p>Inclusive leaders articulate authentic commitment to diversity, challenge the status quo, hold others accountable, and make diversity and inclusion a personal priority.</p>	<p>HUMILITY</p> <p>Inclusive leaders are modest about capabilities, admit mistakes, and create space for others to contribute.</p>	<p>AWARENESS OF BIAS</p> <p>Inclusive leaders show awareness of personal blind spots as well as flaws in the system, and work hard to ensure a meritocracy.</p>
<p>CURIOSITY ABOUT OTHERS</p> <p>Inclusive leaders demonstrate an open mindset and deep curiosity about others, listen without judgment, and seek with empathy to understand those around them.</p>	<p>CULTURAL INTELLIGENCE</p> <p>Inclusive leaders are attentive to others' cultures and adapt as required.</p>	<p>EFFECTIVE COLLABORATION</p> <p>Inclusive leaders empower others, pay attention to diversity of thinking and psychological safety, and focus on team cohesion.</p>

Inclusive culture depends on a leader *actively challenging* personal and organizational biases and asking others for critiques or insights. This speaks to an essential point in inclusive leadership: it is a practice, something to cultivate and build every day, rather than a set of fixed traits.⁴⁰

NATIONAL CENTER FOR WOMEN & INFORMATION TECHNOLOGY'S (NCWIT) APPROACH TO INCLUSIVE CULTURE

We define culture as a shared set of norms, values, processes, and practices through which employees engage in the context of their work. Culture determines the types of individual behaviors that are acceptable or desirable. Taken collectively, individual behaviors and interactions create and recreate culture every day.

Inclusive cultures are ones where all members can thrive, feel a sense of belonging, contribute their abilities and perspectives, and receive credit and recognition for these contributions. Inclusion, as we use the term, requires paying close attention to the experiences of historically marginalized populations and to systems of power, privilege, and bias.

Organizations typically consist of many subcultures that intersect and diverge in complex and continually evolving ways. It therefore makes more sense to talk about localized subcultures within an organization rather than treat the organization as a unified whole. For this reason, inclusive culture must be built at the team level.⁴¹

ACTION 1

Increase your personal DEI expertise.

People in the tech industry are familiar with the concept of “failing fast” and “failing forward” — using failure to learn and experiment. This is also necessary for DEI, but fear is a huge inhibitor. Like any skill, becoming an inclusive leader takes time, research, and practice. A great DEI advocate must be willing to learn and make mistakes. You don’t need to be an expert at the start, but you do need to model a growth mindset for other leaders and hold yourself accountable for outcomes.

HIGH LEVERAGE POINTS

CEOS

C-SUITE LEADERS

CHANGE AGENTS



CEOS



C-SUITE LEADERS



MANAGERS



TEAM MEMBERS

IN SUMMARY

- 1.1. Allyship is not a state; it’s an ongoing action. Make time for the personal reflection and engagement that sustains allyship.
- 1.2. Interact personally and on an ongoing basis with employees from underrepresented groups and Employee Resource Groups (ERGs).
- 1.3. Model a growth mindset.
- 1.4. Disrupt everyday biases that subtly but repeatedly harm people from underrepresented groups.
- 1.5. Give personal signals that you’re an inclusive leader.

“Accountability starts with us. Leaders build trust and develop people when they support underrepresented communities, inspire a culture of belonging from within, and ultimately increase representation at all levels. When CEOs are personally involved, that’s when we see real and sustained change in the diversity, equity, and inclusion of our teams.”

TIM RYAN, US CHAIR AND SENIOR PARTNER, PWC

How to do it

1.1. ALLYSHIP IS NOT A STATE; IT'S AN ONGOING ACTION. MAKE TIME FOR THE PERSONAL REFLECTION AND ENGAGEMENT THAT SUSTAINS ALLYSHIP.

- A. Audit your personal and professional network.** Is your trusted inner circle diverse? Can you intentionally expand your inner circle to hear perspectives from underrepresented groups?
- B. Read, watch, listen.** Educate yourself about underrepresented communities and their histories. (Don't lean on others to educate you.)⁴² Sign up for resources like *Better Allies: 5 Ally Actions* newsletter, *Race Ahead* newsletter,⁴³ or others that provide alternative views and experiences.⁴⁴
- C. Trust and rely on experts to elevate your personal learning.** Many people have been doing this work for years and can be resources to you on your own DEI journey. This includes your CDO and DEI team (if you hired them). This doesn't mean you delegate *leadership* on DEI to those around you—it just means you don't have to do this work alone.

TOOL KIT [↗](#)

- 3i Framework: the individual path to impact and allyship
- Better Allies: 5 Ally Actions Newsletter
- NCWIT Guide: Male Allies and Advocates
- Race Ahead Newsletter



Source: Paradigm.^{45, 46}

1.2. INTERACT PERSONALLY AND ON AN ONGOING BASIS WITH EMPLOYEES FROM UNDERREPRESENTED GROUPS AND EMPLOYEE RESOURCE GROUPS (ERGS).

You can learn and make a huge impact by showing up for your employees to support ERGs or simply hear from employees from underrepresented groups about their lived experiences, inside and outside work. Specifically, you can:

- A. Audit the mentees and junior team members** you spend time with. How many people are you formally or informally sponsoring? How many are from underrepresented groups?
- B. Attend ERG meetings and events** as often as you can to listen and learn.
- C. Create spaces for your employees** from all demographics to meet and speak to you directly.
- D. Read the comments** in your employment engagement and/or inclusion surveys. Ask for the data to be cut by demographics ([SEE ACTION 6](#)). Share survey results with your employees and ERGs.

1.3. MODEL A GROWTH MINDSET.

A growth mindset means believing that talent and ability are not fixed or predetermined, but that we can grow and change through “hard work, good strategies, and input from others.”⁴⁷ Not only do leaders need a growth mindset for their own inclusive leadership development, but they also need to apply that mindset to how they think about talent.⁴⁸ In a leader, a growth mindset looks like hiring for “potential, capacity, and a passion for learning,” as opposed to specific credentials, and investing significant time developing and guiding other C-suite leaders.⁴⁹ Majority group members who have a growth mindset about prejudice—that is, who believe prejudiced attitudes can be changed with effort—are more comfortable engaging in interracial interactions.⁵⁰

TOOL KIT [↗](#)

NCWIT SUPERVISING-IN-A-BOX SERIES

Employee Development

Supervisors as Change Agents

Team/Project Management

1.4. DISRUPT EVERYDAY BIASES THAT SUBTLY BUT REPEATEDLY HARM PEOPLE FROM UNDERREPRESENTED GROUPS.

- A. Ensure everyone from the C-suite to new hires learns how bias can show up** in everyday behavior in the form of microaggressions, how to identify it, and how to talk about it. Microaggressions are remarks, questions, or actions that are painful, demeaning, or insensitive because they have to do with a person’s perceived membership of a group that is marginalized or subject to stereotypes.⁵¹ They can happen casually, frequently, and without any intent to cause harm. They can even be meant as a compliment or joke—which is why they can feel confusing and disconcerting.
- B. Use inclusive language** in personal and corporate communications.

1.5. GIVE PERSONAL SIGNALS THAT YOU’RE AN INCLUSIVE LEADER.

Your team takes cues from you and your leadership. Simple acts and behaviors can signal personal respect for certain groups, normalize those behaviors with your team members, and instill trust, particularly when these signals are backed up with an understanding of why they’re important. Here are some easy practices you can implement immediately.

- A. Acknowledge injustices that have occurred to certain communities** through company-wide communications, taking time at the beginning of town halls, etc.
- B. Encourage flexible work arrangement policies,** leave, and work-life balance to normalize a balanced culture. Work-life balance is an equity issue.
- C. Consider sharing your pronouns** to signal that you understand and respect diverse gender identities. That will encourage employees to do the same and not assume anyone’s gender identity. At the same time, accept that some are not comfortable sharing their pronouns.
- D. If you wish to respect Indigenous communities,** it’s important to note that our offices and homes are on land that was taken from Indigenous peoples. When opening formal meetings, one way to respect Indigenous communities is to name which groups were the original inhabitants and stewards of the land you’re gathering on. This acknowledges their existence, experience, history, and deep connection to that land.⁵²

TOOL KIT [↗](#)

DISRUPTING EVERYDAY BIASES

NCWIT: Critical Listening Guide

NCWIT: Interrupting Bias in Industry Settings

PRONOUNS

Culture Amp: Why sharing gender pronouns at work matters

MyPronouns.org: Resources on personal pronouns

INDIGENOUS LAND ACKNOWLEDGMENTS

“I’ve started acknowledging the people who lived on this land first—and you should, too”

“Our home on native land”

FLEXIBLE WORK RESOURCES

NCWIT: 13 Tips for Conversations About Flexible Work

NCWIT: Building Inclusive Cultures for Work While at Home

Support flexible work arrangements, leave, and work-life balance

Flexible work, leave, and support for work-life balance are critical DEI issues. The pandemic exposed⁵³ the degree to which different groups were disproportionately impacted by varying workplace policies, and how equity issues specifically intersected with issues of work-life balance.⁵⁴ Mothers of small children faced particularly devastating effects, experiencing significantly greater declines in employment levels than men.⁵⁵

Many companies offer leave and/or part-time options, but taking those options can incur reputational costs. Access to work-from-home benefits has increased in the professional and technical service industries, especially in the pandemic, but that hasn't necessarily improved work-life balance.

Moreover, work-life balance is an equity issue because being able to work long hours often depends on other privileges (e.g., having a partner to look after children, a housekeeper to maintain your home, etc.). Normalizing the ability to work at times that factor in the personal commitments of your employees, from caretaking responsibilities to long commutes, ensures that employees can take advantage of those benefits without stigma or repercussions. As we recreate the workplace post-pandemic, we have an unprecedented opportunity to increase inclusion.

CEOs and top leadership can:

- **Model work-life balance** to remove stigma and establish norms around leave and flexible work.
- **Assess flexible work policies** and whether they're accessible (Chapter 6, NCWIT: Women in Tech: The Facts).⁵⁶
- **Equitably factor in any leave taken** when assessing employee performance (e.g., an employee who took three months' leave shouldn't have their achievements directly compared to those working 12 months).
- **Create a safe space** for the discussion of flexible work options.
- **Share practices and learn** from peer organizations.⁵⁷
- **Understand why people choose flexible work**—for example, remote work options are important because some people live in rural areas or on reservations and may not want to or be able to leave.
- **Operate with the understanding** that family and competing responsibilities are not “women's issues,” but rather concerns and policies that are important for everyone.⁵⁸

ACTION 2

Establish DEI as a business imperative.

A successful DEI strategy is one that's embedded in the heart of a company's business plan. DEI is too often an afterthought or a tick-the-box compliance model, rather than integrated into business strategy. DEI too often depends on individual champions, rather than being an ingrained habit for everyone in an organization. CEOs must drive an ongoing DEI conversation within tech and business organizations. Those tech and business organizations must then drive DEI outcomes across the enterprise. And all these leadership efforts must be directly inserted into the company's accountability infrastructure and business plan.

HIGH LEVERAGE POINTS

CEOS

C-SUITE LEADERS

CHANGE AGENTS



IN SUMMARY

- 2.1.** Include DEI as a core company value and annual priority. Ensure each C-suite leader's business plan has DEI objectives on representation, culture, and, where applicable, product.
- 2.2.** Elevate the role of Chief Diversity Officer (CDO) to ensure they have adequate authority, training, and resources to influence the C-suite.
- 2.3.** Apply the same risk tolerance to DEI as to product innovation.
- 2.4.** Devote part of one board meeting and, ideally, part of one quarterly earnings call to DEI challenges and progress.
- 2.5.** Prioritize DEI in your company's spending strategy through intentional partner, vendor, and supplier diversity policies.

ELEVATING CDOs AND PROFESSIONALIZING DEI

While DEI takes on ever increasing importance in companies of all sizes, DEI leaders and CDOs have not historically had a professional community, curriculum, or body of knowledge to support their work. It's critical we do more to elevate and professionalize DEI.

CDOs must have adequate authority and evidence-based knowledge to drive deeply complex change management across all aspects of business. While DEI is everyone's job, without one central, empowered, resourced expert, change is unlikely to happen. An increasing number of universities offer evidence-based education and certification on DEI.⁵⁹

CISCO'S SOCIAL JUSTICE BELIEFS – VALUES IN ACTION

In the summer of 2020, the national and global reckoning with racial injustice helped accelerate Cisco's long journey to dismantle injustice and inequity. The company established a set of **Social Justice Beliefs** and launched 12 subsequent actions⁶⁰ with a five-year commitment to invest in social justice work focused on the Black and African American communities.

The first step was to identify Cisco's Social Justice Beliefs, which inspires how Cisco acts as a business, including their commitment to social justice, and supports the company's core purpose, which is to *power an inclusive future for all*. Cisco engaged employees across the company to identify five beliefs: Technology for Good, Commitment to Justice, Addressing Insecurity of Being, Culture of Coalescence, and Curiosity, Proximity & Empathy.⁶¹ These beliefs are a constant. They provide a way to decide when and how the company takes action to respond to injustice across the full spectrum of diversity, now and into the future to drive generational change.

To ensure that Cisco has a big enough infrastructure to execute on its actions, the company created the Inclusive Future Action Office, which houses social justice strategic initiatives. This office currently supports the global enterprise-wide teams that are working on the 12 actions dedicated to Black and African American communities, helping to identify core objectives, define KPIs, and measure progress and outcomes. For example, the Action Office is helping the **Action #8**⁶² team execute on Cisco's commitment to partner with Historically Black Colleges and Universities (HBCUs). In partnership with the **Student Freedom Initiative**⁶³ and **Computex Technology Solutions**,⁶⁴ Cisco made a \$150 million commitment toward spurring the recovery, resiliency, and legacy of HBCUs in perpetuity.

To ensure success, the Action Office sets up clear time milestones for progress. The office also focuses on developing actions with recurring global impact that can be replicated based on best practices. Each social justice action has an executive leadership team sponsor who is held accountable for progress in their performance. Over time, the company hopes to scale the office's capabilities to take on any social justice issue or purpose-driven initiative Cisco wants to champion, from ideation to execution to measuring impact.

How to do it

2.1. INCLUDE DEI AS A CORE COMPANY VALUE AND ANNUAL PRIORITY. ENSURE EACH C-SUITE LEADER'S BUSINESS PLAN HAS DEI OBJECTIVES ON REPRESENTATION, CULTURE, AND, WHERE APPLICABLE, PRODUCT.

If DEI is to be a business imperative, it must be harnessed to the company's core business strategy. Look at the processes in place to deliver other business priorities, such as financial targets or product launches. The same rigor (and often the same or similar processes) should be applied to DEI. If you wish to embed DEI as a business imperative, you should:

- A. List DEI in company statements**, along with other business imperatives, when setting out annual priorities and/or company values.
- B. Require all leaders** to create their own DEI priority objectives and key results/KPIs [\(SEE ACTION 3.3\)](#).
- C. Hold leaders accountable** for making progress toward any DEI objectives and key results in the same way they're held accountable for other results.
- D. Invest in the DEI data infrastructure** that can track and measure leadership accountability.
- E. Ensure that any strategies included** in a company's Diversity Annual Report are reflected/actioned in the company business plan and are adequately resourced [\(SEE ACTION 3.1\)](#).
- F. Increase cross-functional efforts** across the company to deliver DEI priorities.

2.2. ELEVATE THE ROLE OF CHIEF DIVERSITY OFFICER (CDO) TO ENSURE THEY HAVE ADEQUATE AUTHORITY, TRAINING, AND RESOURCES TO INFLUENCE THE C-SUITE.

This report calls for powerful systemic change, and CDOs need authority to implement those changes, with the full support of the CEO. For more advice on what a CDO role entails, see *Harvard Business Review* September 2020.⁶⁵

Ensure CDOs have:

- A. The attention of the CEO**, either because they're a direct report or meet regularly.
- B. Direct access to the C-suite**. If they don't sit on the C-suite, they should meet with that full team at least monthly, and meet C-suite leaders individually at least quarterly.
- C. The option to convene a quarterly DEI offsite** for the CDO and the C-suite to measure progress, or a quarterly business review of DEI objectives and key results (OKRs)/key performance indicators (KPIs).
- D. A DEI team that can coach** and develop DEI competencies for all leaders and managers.
- E. Partnerships with tech and product leaders** to embed product inclusion principles.
- F. Adequate budgets and head count** to support the above.

2.3. APPLY THE SAME RISK TOLERANCE TO DEI AS TO PRODUCT INNOVATION.

Fear of legal risk often weakens a company's resolve to take bold DEI measures. There is very real legal risk in the DEI space that companies must be aware of. However, the cautious approach of many companies is also guided by the *perception* of risk, fear of reputational harm, and internal DEI philosophy, rather than by regulatory scrutiny or *actual* legal risk. While there are clear pitfalls to avoid, namely outward discrimination against any protected class,⁶⁶ there is latitude to make progress on DEI within legal boundaries.

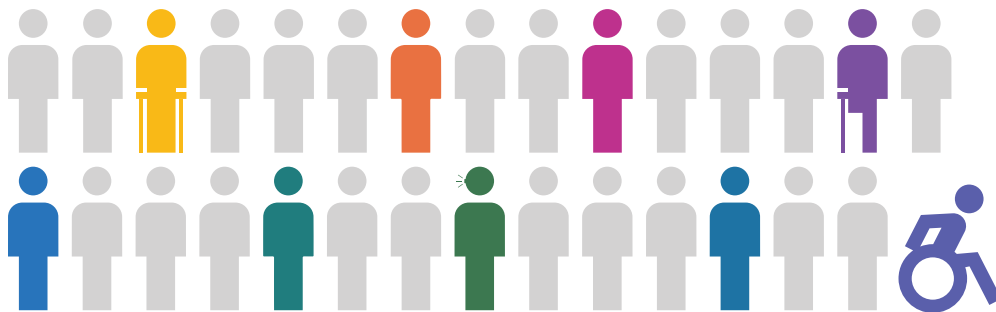
The legal risk a company is willing to absorb is ultimately a business decision. However, decisions about DEI risk tolerance are frequently delegated to the legal team. If CEOs and the C-suite want to take bold action around DEI, they should consider the full spectrum of legal risk for decisions focused on DEI work, and consider developing the same risk tolerance for DEI as they have for business and product risk in appropriate situations. Weighing the spectrum of risk in DEI, in turn, requires great familiarity with its legal parameters.

CEOs, C-suite leaders, and general counsels should consider their risk tolerance in the following areas:

- A. Collecting, using, and/or sharing demographic data** during the recruiting and hiring process.
- B. Collecting and using demographic data during the interview process.**
For example, implementing a lawful diverse candidate slate initiative or variation of the Rooney Rule or Mansfield Rule, which law firms have used to ensure that at least 30% of candidates considered for leadership positions are women, from underrepresented racial and ethnic groups, LGBTQ+, or people with disabilities.^{67, 68}
- C. Setting legal internal and public hiring** and/or aspirational representation goals (not quotas).

THE MANSFIELD RULE ENSURES THAT AT LEAST

30% of candidates considered for leadership positions are from underrepresented groups.



All the above must be documented. To help mitigate legal risk, a company should be able to provide documentation of the decisions made throughout the hiring process.

Color-Blind vs. Race-Conscious Hiring

There's a growing awareness that "color-blind" recruitment policies haven't led to a more diverse workforce. Yet "race-conscious" hiring remains complex terrain.⁶⁹ While companies may have more latitude to set DEI goals than they think, the ACT Report calls for a clarification in the current law to provide businesses with greater certainty. This is particularly important as businesses increase practical efforts to improve racial equity.

As these efforts increase, practitioners may run into an inherent tension: on the one hand, employers have an obligation to act without regard to race and gender. On the other hand, employers recognize the need to mitigate long-standing systemic barriers that disadvantage women and underrepresented groups. The U.S. Supreme Court recognized this tension as far back as 1979.⁷⁰ Civil rights legislation was intended to expand opportunity to those denied it due to racial discrimination,⁷¹ yet those same laws currently prohibit most employers from voluntary efforts to be more race-conscious in promoting racial equity.

It is hard to promote racial equity without being race-conscious.⁷² The Supreme Court's ruling in *United Steelworkers v. Weber* authorized private employers to make voluntary efforts to support women and underrepresented groups in the workplace under limited circumstances. The legal risk for employers who wish to implement a race-conscious (or gender-conscious) approach remains uncertain because the Supreme Court's relevant decisions date back decades, and have not recently been tested in the area of employment law.

SETTING REPRESENTATION GOALS

An organization can make a case for a more diverse and representative workforce to reflect either the available talent pool or, in some cases, regional and national demographics. In these cases, the race or gender identity of an applicant can be considered, provided *it is not a determinant for a hiring decision*. If the following factors in recruitment and hiring are clearly delineated, they can help protect companies from legal risk and class action. These factors include:

- Clear communication and adherence to Equal Employment Opportunity (EEO) and related policies.
- Clarity on DEI aspirational goals and policies within the company.
- Clear job descriptions with expected qualifications and experience.
- Training for recruiting and HR staff on risk mitigation and legal compliance.
- Ensuring only individuals who meet the requisite, codified qualifications are interviewed and considered for the role.
- Avoiding final hiring decisions based on the demographic of the individual.

Numerical targets for inclusive hiring can be set, provided these never amount to fixed quotas for hiring specific demographics. To meet those goals, organizations can legally hire above the market available talent pool (MATP)*—a data point often used to cap representation goals—as long as they're consistent with the law and take the following approaches:

- Stretch goals for increasing workforce diversity must be rooted in reason and data.
- Use data to assess shortfalls for underrepresented groups in certain roles or on certain teams.
- Actively develop pipelines of underrepresented groups and establish hiring outreach practices that attract more people from underrepresented groups.

In summary, as long as you have data and a plan to back it up, you can be aspirational in your goal setting, which can include efforts to hire above MATP. For a starting point, please see the ACLU's brief, *Inclusion Targets: What's Legal?*⁷³ and the American Bar Association's review of *Race Conscious Hiring Under Title VII*.⁷⁴

* Market available talent pool (MATP) is the pool of workers who could realistically be hired for a given role based on the requisite skills, education, experience, and, in some cases, geography required for that role. MATP is significant because it's a key benchmark used to determine whether a company is taking excessive legal risk in hiring policies to redress historic imbalance in the workforce.

Where Next for Affirmative Action?

Affirmative action carries with it many negative connotations but, used properly, it provides a targeted and granular approach to tackling systemic inequity. Affirmative Action Plans (AAPs) define when and how an employer can proactively recruit, hire, and promote underrepresented groups. AAPs are required for all federal contractors and subcontractors. However, to date, those AAPs haven't effectively made the intended systemic changes.

One avenue to consider is whether tech companies can make an industry-wide case of a “manifest imbalance” in gender and racial diversity in tech (or other sectors). Currently, companies can only do this individually to redress historic discrimination in their own hiring, which includes an admission that they've engaged in discriminatory practices. Because of this, Voluntary Affirmative Action Plans (VAAPs) are hardly ever used by employers to improve workforce diversity.⁷⁵ If, on the other hand, companies could collectively and compliantly work toward progress based on industry challenges, they might be more inclined to do so. Greater clarity around the law, in tandem with sustained pressure for robust race-conscious hiring strategies to reverse decades-old systemic inequity, has the ability to deliver systemic change. Employers must also keep other issues in mind when using AAPs and reviewing their recruiting processes to create a diverse workforce.⁷⁶

THE POSITIVE ROLE OF AFFIRMATIVE ACTION *

Some people believe that affirmative action means taking something from one group and giving it to another. In fact, it is exactly the opposite—the goals of affirmative action programs are rooted in making sure that this is not happening (and does not become necessary).

Embracing affirmative action means identifying and changing systemic issues for the better; it should not mean instilling racial, religious, or gender-based quotas at your company. These quick fixes merely serve as a Band-Aid to cover a deep wound, and they often do more harm than good—to companies, to employees, and to society as a whole.

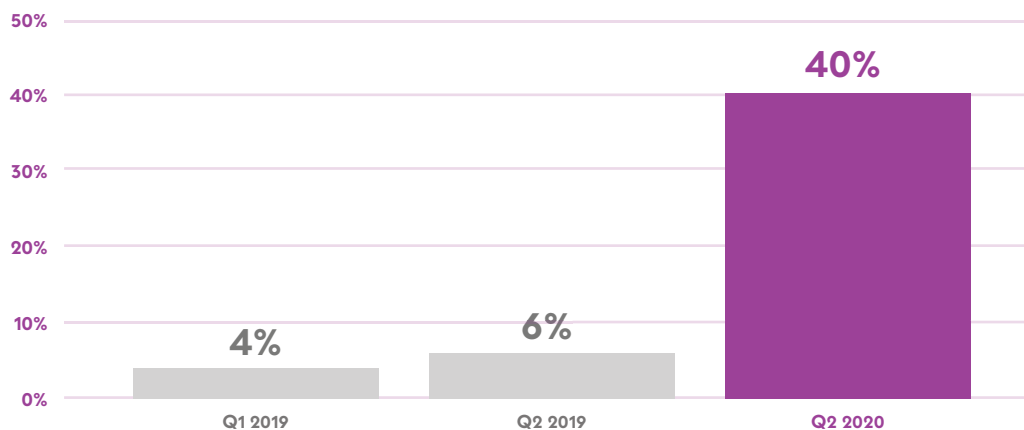
Ongoing misconceptions about affirmative action make meaningful progress more challenging, but those challenges should not be insurmountable. Affirmative action—the right conception of affirmative action—is the most powerful tool organizations have to address the systemic issues our society continues to face. At this moment in history, we must embrace it, elevate it, talk about it, understand it, and celebrate it.

* Excerpt from “How to Strengthen Your Affirmative Action Policies,” by Matt Nusbaum, Director, BCGI. *HR Daily Advisor*, July 2020.⁷⁷

2.4. DEVOTE PART OF ONE BOARD MEETING AND, IDEALLY, PART OF ONE QUARTERLY EARNINGS CALL TO DEI CHALLENGES AND PROGRESS.

In line with “what gets measured gets done,” reporting on DEI should be elevated to ensure the highest levels of accountability (i.e., not only to the executive team, but also to the board and shareholders). Following 2020’s racial reckoning, research shows that 40% of S&P 500 companies discussed DEI policies during Q2 earnings calls in 2020, up from 4% in Q1 and 6% during Q2 2019.⁷⁸

PERCENTAGE OF S&P 500 COMPANIES DISCUSSING DEI POLICIES ON EARNINGS CALLS



It is becoming more common for companies to report DEI efforts to their boards. Regular DEI reporting should be a routine feature of corporate practice, as it drives a longer-term focus on DEI strategies and outcomes.

- **Consider the best way** to get the board information they need to exercise oversight.
- **Ensure the legal team reviews** all board communications for legal risk and mitigation purposes.
- **Ensure that reports** to the board are either privileged or aligned to external reporting on the same topics.

Boards, in collaboration with company leadership, must take a deliberate approach to DEI. According to the National Association of Corporate Directors, there are four initial steps to take:⁷⁹

- **Demonstrate purpose and values:** Boards should work with management to revisit and reaffirm a company’s values, examine an organization’s culture and history, and reflect internally on what learning they must do as individuals.
- **Elevate the experts:** The board should engage deeply with the company’s CDO and DEI team, approaching DEI like any other business function.
- **Allocate corporate resources:** Ensure resources are spent in a way that advances DEI.
- **Clarify expectations of the CEO:** Work with the CEO to define their role on DEI issues, and measure and compensate them for performance on DEI goals.

2.5. PRIORITIZE DEI IN YOUR COMPANY'S SPENDING STRATEGY THROUGH INTENTIONAL PARTNER, VENDOR, AND SUPPLIER DIVERSITY POLICIES.

How you spend your resources is a powerful manifestation of your company's values. Supplier diversity, or inclusive procurement, is a proactive business program or strategy that ensures a diverse supplier base for an organization's procurement of goods and services. It generally focuses on creating a diverse and inclusive supply chain, and requires a mechanism to record and report diverse supplier spend. Supplier diversity widens a company's pool of potential suppliers while also benefiting the broader community by generating business for marginalized communities.⁸⁰

Diverse suppliers are generally small businesses, and broadly defined as at least 51% owned and operated by someone from an underrepresented/underserved group, although definitions can vary.

Here are some common first steps to this approach (taken from Intel's Supplier Diversity Quick Start Guide):⁸¹

A. Establish scope of program

- Define *diverse supplier* and include those owned by women, underrepresented racial/ethnic groups, LGBTQ+ individuals, veterans, the disabled, and veteran-disabled individuals.⁸²
- Supplement/support supplier diversity goals with a program that rewards/develops diverse suppliers (i.e., Google offers specific benefits to vendors who meet their requirements).⁸³
- Consider investing a percentage of cash holdings into financial institutions that serve underrepresented communities (see [this commitment from Netflix](#)).⁸⁴

B. Establish a process to measure spend with diverse suppliers. Start by auditing the company's existing supplier base to create a baseline of diverse supplier spend.

C. Create a policy statement with measurable goals. Goals could include:

- Percentage goals for procurement of diverse suppliers (e.g., 10% for minority-owned businesses, 6% for women-owned businesses, etc.).
- Annual dollar target to spend on diverse suppliers.

D. Integrate inclusive sourcing processes into standard operating procedures to maximize impact and inclusion. For example, include diverse suppliers in all new RFPs.

Your supplier diversity program can and should extend to all entities your organization does business with, including content creators and advertisers.

TOOL KIT [↗](#)

SUPPLIER DIVERSITY

[Intel Supplier Diversity Quick Start Guide.](#)

[A Quick Guide to Building a Supplier Diversity Policy.](#)

CASE STUDY: INCLUSIVE PROCUREMENT PROGRAM AT SALESFORCE

In 2020, Salesforce doubled down on its efforts to advance equity by forming the **Racial Equality and Justice Task Force**⁸⁵ to drive systemic change in the workplace and community across four core pillars: people, purchasing, philanthropy, and policy. For purchasing, Salesforce's goal is to commit \$100 million to Black-owned businesses and \$100 million to underrepresented minority-founded companies by 2023.

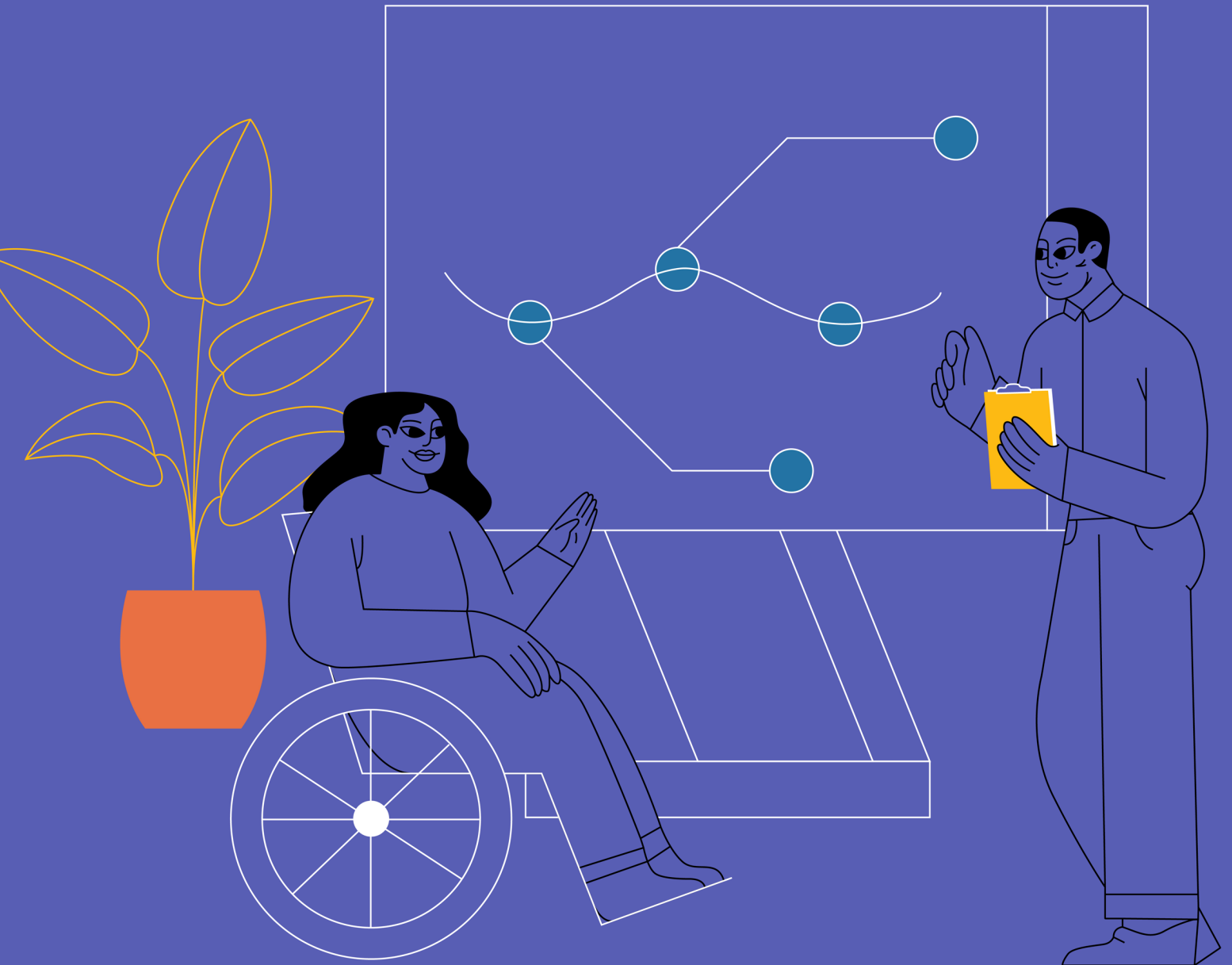
To help deliver on the strategy, the Task Force launched the first cohort of its Black-Owned Business Mentor/Sponsor Program in July 2021, supporting 25 Black-owned businesses with mentorship, sponsorship, education, and other corporate network opportunities to strengthen and grow their businesses.

The program pairs each participant with a senior Salesforce mentor to provide ongoing coaching and support in identifying and meeting their business goals. In addition, participants are matched with a Salesforce executive sponsor at the VP+ level who provides higher-level strategic guidance. These pairings are thoughtfully considered, taking into account the executive's expertise and the participant's unique needs. Every quarter, the program also offers 90-minute educational sessions with professors from top universities, who cover subjects like how to access capital and when to make strategic pivots. Participants also meet in group sessions to learn from other corporate supplier diversity leaders, discuss challenges, and share best practices.

The goal of the program is to build a strong pipeline of Black-owned businesses and suppliers. While this program won't directly affect Salesforce's internal supplier diversity goals, it is a critical part of its strategy to help close the racial wealth gap and advance equality.

Salesforce has also implemented several other initiatives to support its diverse procurement program, including introducing an accelerated payment option for small businesses and offering suppliers the option to shorten payment terms to net 15. Salesforce plans to expand the mentorship program with a second cohort of 25 Black-owned businesses next year.

Operationalize DEI throughout the business



CEOs must approach and resource DEI like any other business imperative. Companies won't move the needle on DEI until they introduce systemic efforts, led by top leadership, that drive accountability for DEI throughout the company.

Systems have the power to change behaviors at *scale*. Of course, not all systems are created equally or impact different groups equally. That's why a paradigm shift requires us to:

- Redesign systems with the specific objective of minimizing bias and maximizing equity.
- Ensure the people building and operating within those systems are equipped to interrupt their own biases, identify bias in others, and redesign systems to serve all groups.

When aiming to operationalize DEI throughout a business, be aware that your strategy is unlikely to succeed if you are not also building an inclusive culture. This is an iterative process of changing systems, removing institutional barriers, and changing individual behaviors.

ACTION 3 →

Support DEI with funding, metrics, strategies, and accountability.

ACTION 4 →

Redesign systems, including hiring, retention, and promotion systems, to remove bias.

ACTION 5 →

Apply both a DEI framework and an ethical framework to the design of products and services.

CONTEXT (ROOT CAUSES AND THE WHY)

Unconscious and conscious bias harms career outcomes for underrepresented groups. Stereotypes coalesce into standards and expectations that systematically advantage a particular group (predominantly but not exclusively White men) at the expense of other groups.⁸⁶ These standards and expectations are expressed in performance-management processes—feedback, ratings, promotions, compensation, succession planning—that may be biased against underrepresented groups, especially because managers' (biased) subjective assessments tend to play a big role in these processes.⁸⁷ Therefore, the *direct root cause* of slower career advancement for underrepresented groups may be the bias that is consciously or unconsciously baked into performance-management processes and systems.⁸⁸

LITMUS TEST

If you want to know if your DEI strategy has truly been operationalized at your company, ask any middle manager to tell you the actions they take on a regular basis, and in the last three months, to implement your company's DEI strategy. If they have no significant actions or outcomes to report, this tells you that your DEI strategy isn't being operationalized.

HIGH LEVERAGE POINTS FOR OPERATIONALIZING DEI THROUGHOUT THE BUSINESS

RECRUITING SYSTEMS In recruiting systems, many structural barriers and systemic biases combine to exclude underrepresented groups. Companies should embrace *inclusive hiring*, which means taking special care to source, screen, and short-list candidates without bias related to age, race, gender, religion, sexual orientation, and other personal characteristics unrelated to job performance.⁸⁹ Leaders should focus on policies to increase the number of qualified and diverse candidates on final interview slates, such as the Mansfield Rule, conducting structured interviews, introducing work sample tests for recruitment, and/or implementing unbiased criteria for evaluation. Once these new systems are in place, it's critical to monitor effectiveness and reward successful behavior. This may include monthly or quarterly readouts to acknowledge managers and recruiters who achieve the most inclusive candidate slates.

MIDDLE MANAGERS Middle managers are the gatekeepers for DEI in many ways, yet they often lack support from upper management to carry out DEI initiatives or integrate DEI into their day-to-day jobs. In addition, DEI initiatives are still largely voluntary for busy middle managers. Without proper incentives, this group is likely to opt out of DEI initiatives that may not produce clear, short-term ROI.

“Research suggests employees leave managers, not companies... Even if an organization has excellent policies and programs in place, these will be of little good for employees whose managers do not allow them access to these policies or programs. Change efforts must include educating managers about bias and ways to address it.”⁹⁰

It is vital to acknowledge and reinforce behaviors of middle managers who are effective in their DEI efforts.

DEI DATA INFRASTRUCTURE Creating a robust DEI data infrastructure allows you to collect, track, and report DEI data. Data demonstrates where you are, how far you have to go, and where you should focus your DEI resources. It empowers leaders to make informed decisions, define strategy, and track progress at a team level. Don't skimp on it.

PRODUCT INCLUSION Building inclusive products is best achieved by diverse teams with multiple experiences and backgrounds having a say at every stage of the design process. Those diverse teams must proactively integrate product inclusion principles into every stage, including ideation, user research, and product testing.

ACTION 3

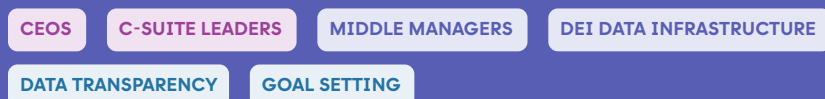
Support DEI with funding, metrics, strategies, and accountability.

Companies must approach DEI with the same level of strategic thinking, resourcing, and accountability as any other business priority. As the Gender and Diversity KPI Alliance states,

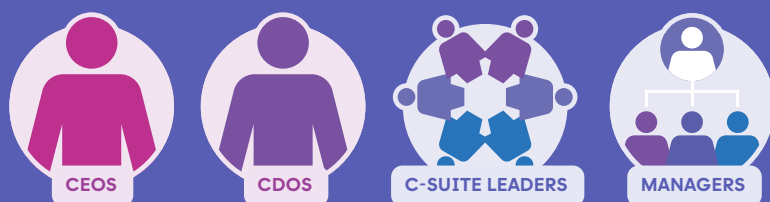
“You can’t manage what you can’t measure, and... what you measure tends to be improved. This is just as true for DEI as for any financial measure that corporations track. It is important to measure the right things; measurement focuses on monitoring results, not effort. The number of DEI policies is not a key metric. Rather, the value is in whether actual progress is made.”⁹¹

To measure progress on equity and inclusion, however, companies need to track more than representation.⁹² Without tracking inputs into critical processes affecting equity and inclusion, such as employee development and performance evaluation, it is difficult to change culture. Companies should, for example, keep track of patterns in task assignment and role distribution and analyze formal feedback to ensure consistency in length and quality.⁹³

HIGH LEVERAGE POINTS



CHANGE AGENTS



IN SUMMARY

- 3.1.** Create DEI data infrastructure to equip teams and leaders with data to make informed decisions, define strategy, and track progress.
- 3.2.** Set internal goals and track implementation of strategic actions (best practice requires goal setting at entry-level, mid-career, and leadership levels).
- 3.3.** Create incentives for C-suite leaders, managers, and others to achieve DEI goals.
- 3.4.** Direct a pay audit for underrepresented groups, starting with gender and race, to close gaps.

How to do it

3.1. CREATE DEI DATA INFRASTRUCTURE TO EQUIP TEAMS AND LEADERS WITH DATA TO MAKE INFORMED DECISIONS, DEFINE STRATEGY, AND TRACK PROGRESS.

CEOs and leaders must clear obstacles that limit internal DEI data collection, and make it accessible to those who need it to drive change. Take the following steps:

- A. Build an internal data infrastructure.** This includes a consistent mechanism for collecting and sharing demographic data at the pipeline, interview, hiring, promotion, and attrition stages. Human Resources Information Systems (HRIS) have tools to support data collection and sharing.
- B. Make DEI data around representation, hiring, promotion, and attrition available to managers** with more than 20 employees, subject to legal data thresholds and considerations.
- C. Ensure that your data is as current as possible.** While annual snapshots such as data reported in Diversity Annual Reports are helpful to track macro progress over a year, they don't allow leaders to actively diagnose opportunity areas and take action to improve the experiences of certain demographics.

TOOL KIT [↗](#)

- [7 Steps to an Effective Pay Equity Audit](#)
- [Conducting a Pay Equity Audit](#)
- [How to Identify—and Fix—Pay Inequality](#)

BUILDING YOUR COMPANY'S DEI DATA INFRASTRUCTURE

Example of how hiring data can be reported, taken from a company's diversity data dashboard.

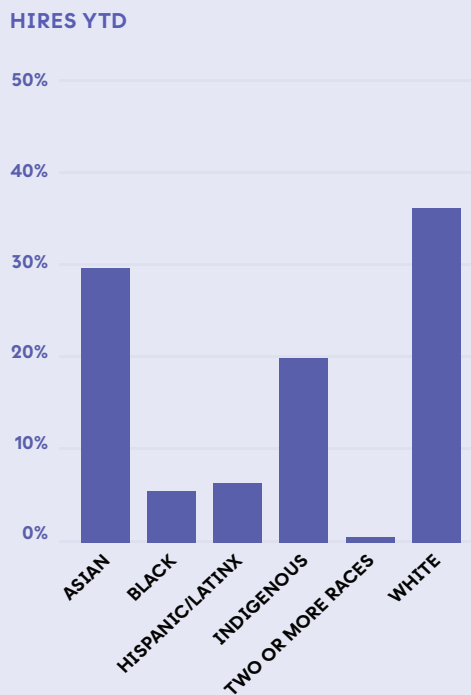
SHOWS Hires by demographic group as a percentage of the total number of hires in your organization since January 1, 2020.

N-COUNT Number of hires made since January 1, 2020.

USE TO Track hiring efforts by demographic group in the context of overall hiring. Hiring is a critical indicator of future trends.

LOOK OUT FOR If your year-to-date (YTD) hire percentage is less than the total representation figure of your organization for any given group, it's unlikely you'll increase overall representation for that group over time.

AIM TO Progressively increase percentage of hires for underrepresented groups.



3.2. SET INTERNAL GOALS AND TRACK IMPLEMENTATION OF STRATEGIC ACTIONS (BEST PRACTICE REQUIRES GOAL SETTING AT ENTRY-LEVEL, MID-CAREER, AND LEADERSHIP LEVELS).

- A. Decide what to track, establish your baseline, and set meaningful benchmarks ([SEE ACTION 3.1](#) and [RECOMMENDATION 4](#)). Make sure that you include groups that are so small that they are often erased from data (e.g., Indigenous groups) and set goals for increasing both representation and inclusion.⁹⁴
- B. Once leaders know their existing baseline, companies can set goals around implementation of key processes in hiring, employee development, flex work, leave, etc. You will not be able to interpret your outcome (representation) data if you do not know what interventions you intended to implement, and whether those interventions were properly implemented.
- C. Goals should be both challenging and salient, and include targets for individual managers, groups or lines of business, and the organization as a whole.

CASE STUDY: 50:50 THE EQUALITY PROJECT AT THE BBC⁹⁵ — GOAL SETTING AT THE ORGANIZATIONAL LEVEL⁹⁶

In 2016, BBC presenter Ros Atkins set a goal of equal representation of women and men on his nightly news program. At the end of each show, the production team would take two minutes to count and record the gender split of guests. Each month, they reported their numbers. In January 2017, the first month of counting, women made up 39% of contributors on Atkins' show. Three months later, they made up 51%.

Atkins spread the idea to other shows and content teams across the BBC that were interested in gender parity. His method aligned with the EAST theory of behavior change—that to stick, change should be Easy, Attractive, Social, and Timely.

EASY

The 50:50 team shared specific instructions, guidelines, measurement templates, and checklists with all participating programs to provide as much support as possible. Atkins worked with colleagues to create a list of women experts on various topics.

ATTRACTIVE

The project remained voluntary, and participating teams were praised for signing up. Atkins appealed to people's interests by emphasizing that 50:50 would increase the quality and popularity of their shows. Team data was shared across the company to promote accountability, recognize success, and encourage competition.

SOCIAL

Atkins scaled 50:50 by targeting influential core programs that would encourage others. He spread the word that teams were doing well, which helped turn gender parity in content into a new social norm. People were made to feel that they were part of something bigger than themselves.

TIMELY

The goal of equal gender representation was tied to a monthly reporting time frame, and included a daily tally to maintain motivation. Moreover, Atkins started the project after the BBC experienced two scandals around gender pay equity, which made it more relevant. The Director-General of the BBC announced a company-wide 50:50 participation challenge, creating another timed goal.

By 2019, more than half of participating teams—and 74% of those monitoring data for at least 12 months—had hit their 50:50 goal. In a survey, audiences noticed more women on BBC programs. And the number of participating teams has continued to rise.

The full case study can be found in *Goals and Targets for Diversity, Equity, and Inclusion: A High Leverage Point to Advance Gender Equality in the U.S. Tech Industry* by Iris Bohnet and Siri Chilazi.

3.3. CREATE INCENTIVES FOR C-SUITE LEADERS, MANAGERS, AND OTHERS TO ACHIEVE DEI GOALS.

Involving managers at all levels to take ownership of DEI goals by counting, comparing, and tracking progress is a promising strategy to increase DEI.

- A. Include assessment of progress toward goals** in the performance review process.
- B. Link progress toward representation goals with compensation**, specifically of senior leaders and the C-suite.
- C. Provide nonfinancial rewards**, like awards; celebrate best practices of teams, managers, and individuals; and reward small wins and progress toward larger goals.
- D. Consult managers and others on goal-creation and DEI objectives** to achieve buy-in. Managers' actions will likely determine whether a DEI goal is reached. Research suggests that directly engaging managers on diversity-related programs increases ownership of DEI goals.⁹⁷
- E. Require each C-suite leader to create their own DEI objectives and key results**, and hold them accountable through a formal quarterly DEI business review process.

Note: Action 3.3 also appears in [ACTION 7: SET PUBLIC GOALS](#).

3.4. DIRECT A PAY AUDIT FOR UNDERREPRESENTED GROUPS, STARTING WITH GENDER AND RACE, TO CLOSE GAPS.

Conducting an audit to identify potential disparities in pay is essential and requires collecting the right data, which can be resource-intensive. Keep in mind, however, that while a pay audit is a great starting point, a traditional pay equity analysis won't capture disparities created by bias in performance evaluation and advancement practices. For example, there may be few employees from underrepresented groups who advance to senior leadership at all. Comparing compensation only within title levels will create an important, but incomplete, picture of equity in your organization. Because of this, consider conducting adverse impact analyses around promotion and performance metrics.

Here are some quick tips for a successful pay equity audit:⁹⁸

- A. Examine pay practices and policies** across all business units and locations to identify any variability in the criteria used for pay decisions and the discretion given to individual decision-makers. Look at representation within each compensation level, including management, rather than relying on average compensation data, which can be skewed by outliers. Analyze intersectional data where possible.
- B. Jobs in different units or departments may be comparable.** Consider the skills, responsibilities, effort, and working conditions required of a job—not just its title.

C. Identify and assess the factors other than race and gender that may justify pay differentials (e.g., seniority, performance assessments, etc.), then prioritize bias-mitigating action in those areas of your DEI strategy. Correct unwarranted disparities.

CASE STUDY: PAY EQUITY AT MICRON TECHNOLOGY

Micron Technology is a computer memory and data storage company headquartered in Idaho, with approximately 40,000 employees globally.

When Sanjay Mehrotra joined Micron as President and CEO in 2017, he committed to making diversity, equality, and inclusion (DEI) a business imperative. Late that year, an in-house study intended to identify and address pay disparities between men and women found instances in which team members' pay disparities could not be explained by performance or other justifiable factors. In response, Micron remediated the pay of those team members who had been earning relatively less than their peers in comparable jobs with similar performance and based in the same location. By late in 2018, Micron had attained global gender pay equity for base pay.

In 2020, Micron launched six DEI commitments, including a renewed commitment to equitable pay for all team members. Using a data science and artificial intelligence (AI) tool called Syndio to evaluate team member compensation and recommend ways to eliminate pay gaps, Micron expanded its global pay-gap analysis to include potential disparities in cash bonuses and stock awards. The company also added team members with disabilities to its global analysis and, in the United States, veterans and Black and Hispanic/Latinx team members.

Through these concerted efforts, Micron achieved comprehensive global pay equity in base pay, bonus, and stock awards among these underrepresented groups in March 2021. In full transparency, the company shared its entire pay-equity methodology with team members and with its Board of Directors, as well as externally in its DEI Annual Report. Micron also includes specific pay-equity-related metrics in its bonus plan.

Micron's success in achieving global pay equity is proof of what's possible when DEI is firmly embedded into business strategy.

ACTION 4

Redesign systems, including hiring, retention, and promotion systems, to remove bias.

Despite inclusive values held by many people in companies, organizational processes, systems, and structures often contain unconscious and unintentional bias. Those issues must be identified and systems should be redesigned. The point is not to fix people from underrepresented groups by encouraging them to behave more like people from majority groups, but to fix the biased system itself. Start-ups can build in best practices, introduce training, and create inclusive systems right from the beginning.

HIGH LEVERAGE POINTS

RECRUITING SYSTEMS

MIDDLE MANAGERS

DEI DATA INFRASTRUCTURE

PRODUCT INCLUSION

CHANGE AGENTS



IN SUMMARY

- 4.1. Invest in middle managers' success, train them to be inclusive leaders, then hold them accountable for meeting DEI goals.
- 4.2. Design recruiting and interview systems to drive out bias.
- 4.3. Design talent development, feedback, and promotion systems to minimize bias and reward inclusion.
- 4.4. Reduce bias in task assignment and work allocation. Introduce a process to spread stretch assignments beyond favored groups.⁹⁹
- 4.5. Improve sponsorship, allyship, and mentorship opportunities, and ensure the opportunities you personally provide are balanced among different communities.
- 4.6. Use ERGs to support employee development, create community, and contribute to business objectives, but not as a substitute for a DEI strategy.
- 4.7. Evaluate what works and what does not, and iterate accordingly.

How to do it

4.1. INVEST IN MIDDLE MANAGERS' SUCCESS, TRAIN THEM TO BE INCLUSIVE LEADERS, THEN HOLD THEM ACCOUNTABLE FOR MEETING DEI GOALS.

Managers are essential to the success of DEI goals and are often the decision-makers when it comes to hiring and developing talent. Managers must be trained to identify and *disrupt* biases in interactions and within institutions.

BUSTING “THE MYTH OF TALENT”

The “myth of talent” describes talent as innate brilliance and a fixed asset that people either have or don’t have. This is simply not true:

Talent grows with exposure, repeated practice, and the experience of being stretched and challenged.^{100, 101}

The myth of talent includes the implicit assumption that only the graduates of a few elite private universities are truly brilliant, talented, and worth hiring. We see this myth in action in tech and other industries when companies hire within a small insular ecosystem of institutions that are wealthy, socially prestigious, and demographically homogeneous.¹⁰²

If we shift the way we think about talent, we will shift the composition of the workforce.

- A. Manager training to disrupt bias** should cover hiring, feedback, evaluation, meeting facilitation, task assignment, mentorship, sponsorship, and managerial relationships.
- Training should include how to have difficult/courageous conversations about bias in the real world. Managers must develop the skills to encourage, give, and receive feedback about people’s lived experiences, and to encourage discussion that can inform future behavior.
- B. Training should be active and participatory**, more like educational and dynamic workshops, not perfunctory or framed as HR compliance. For this reason, online modules should not replace workshops that engage participants in face-to-face conversations.¹⁰³
- C. Training must be combined with:**
- **Ongoing support**, such as participation in communities of practice, conferences, and events; regular team conversations about DEI; and invitations for feedback.
 - **Process change**. When new behavior patterns get encoded in processes, they are more likely to stick. For example, unconscious bias training can ask hiring managers to be aware of bias. But it’s more effective if that training is supported by a standardized interview process to ensure all candidates are asked the same questions and interviewers assess each answer against a predetermined grading rubric. This process supports the de-biasing of interviews and does not only rely on individual interviewers to be aware of their biases. For concrete resources that help managers create high-performing, diverse technical teams, see [Supervising-in-a-Box Series: Full Series from NCWIT](#).¹⁰⁴
- D. Ensure managers have access to the relevant demographic data** for their teams so they have full visibility into the problem they are trying to solve. Once leaders know their existing baseline, companies can help managers set goals at the team level for hiring, employee development, flexible work and leave, etc. Managers should be assessed on progress made against these goals as part of their performance review ([SEE ACTION 4.3](#)). Partner with professional societies and organizations to create pathways for people of color, particularly women of color, into leadership positions.

CONTEXT (ROOT CAUSES AND THE WHY)

People come to tech careers in many ways, not just by graduating with a CS degree from an elite school. Requiring a minimum GPA to apply or restricting recruiting to elite institutions reinforces structural barriers already in place for people from underrepresented groups.

Overreliance on referrals from current employees or people in a leader’s network can reinforce exclusion.

Approximately 50–70% of jobs in the U.S. are found through informal networks.¹⁰⁵ Black job seekers are less likely than White job seekers to know someone at a company who can contact the employer on their behalf, which accounts for much of the disparity in job offers.¹⁰⁶

4.2. DESIGN RECRUITING AND INTERVIEW SYSTEMS TO DRIVE OUT BIAS.

A. Incentivize diversity over speed-to-hire. Time-to-hire is a common metric companies use to measure progress in recruiting.¹⁰⁷ But there is often a trade-off between diversity and speed—if you want change, recruiters must be incentivized to look longer and harder. This might require limiting reliance on referrals and removing “use it or lose it” policies that take away head count if a position is not filled by a certain date. It might also include a policy to wait to begin interviews until two weeks after posting a job, giving recruiters and hiring managers time to focus on outreach and building a diverse pipeline. Adding more time for candidate outreach, and creating time-based gates at each stage can give qualified candidates from all groups the opportunity to progress through the process at the same rate. For example, set a time frame for conducting first and second interview rounds and extending an offer (versus extending an offer to the first candidate to complete the process).

B. Focus on skills, not degrees. Some companies are removing the requirement for a four-year degree for jobs where candidates have the equivalent skills and experience.¹⁰⁸ This model, also known as competency-based hiring,¹⁰⁹ increases the pool of candidates from all groups and helps reduce the impact of inequity in the U.S. education system. Companies leading the way in this space include Canadian-based Shopify, which has never required a college degree;¹¹⁰ Google, with their new career certificate program;¹¹¹ and IBM. In an open letter sent to the then-incoming Biden Administration in January 2020, IBM reported that it had removed bachelor’s degree requirements for over 50% of its U.S job openings in an effort to focus on “new collar jobs”—newer career paths that require a specific set of skills but not necessarily college degrees.¹¹² In surveying employers about what they value in candidates, researchers at Harvard Business School found that relevant work experience trumps a four-year degree in many cases.¹¹³

TOOL KIT [↗](#)

STRUCTURED CRITERIA/RUBRICS

[re:Work—Guide](#)

USE SOME OF THESE HIRING TOOLS TO HELP TEAMS FIND AND HIRE TALENT FROM UNDERREPRESENTED GROUPS:

[NCWIT: Supervising-in-a-Box Series: Employee Recruitment/Selection](#)

Examples of evidence-based hiring software: [Applied](#), [Greenhouse](#), and [pymetrics](#)

INTERVIEWS

[Harvard Business Review: How to Take the Bias Out of Interviews](#)

[The Re-Do Interview](#)

REVISE JOB DESCRIPTIONS TO FOCUS ON RELEVANT SKILLS AND ELIMINATE BIAS

Job descriptions and ads often include requirements that are not essential to successful job performance or can actually be learned on the job. Research shows that the language in job ads affects candidates' perceptions of job appeal, and that this is mediated by perceptions of belonging (e.g., job language that invokes masculine stereotypes reduces women's anticipated belonging and job appeal).

TIPS AND TOOLS FOR WRITING BETTER JOB DESCRIPTIONS

- NCWIT Tips for Writing Better Job Ads¹⁴
- Use augmented writing software like Textio and Gender Decoder to identify biased language¹⁵

INTERVIEWING FOR SKILLS

There are multiple ways you can structure your interview process to assess a candidate's skills and potential success in a role. One inclusive way is to create cohort hiring days that focus solely on testing the practical application of skills by simulating real work problems in a supportive environment.

- **Create a cohort of candidates who can identify with one another** so they are not the only one in the room. This helps create a sense of community among candidates and minimizes stereotype threat. Tech recruiting teams have had success bringing together women engineering candidates to interview together.
- **Give candidates a practical task** that they would come across in the actual role and ensure the competencies you want to test for are built into that task (e.g., problem-solving, leadership, etc.).
- **Assign an "interviewer" to act as a mentor/support person** rather than a traditional assessor. This approach helps candidates feel comfortable and simulates the type of support that would be available from a manager or a colleague when at work.

C. Build bias-checking procedures, systems, and practices into your interviewing and selection process.

- **Structured criteria/rubrics should be used for hiring**, and audited for bias. If a job description is well-written, it should translate into a useful rubric. Similarly, consider ending the use of unstructured interviews, which can compel the interviewer to rely on false signals linked to building rapport. Instead, implement a structured process using tools that are proven to predict future performance.¹¹⁶
- **Avoid using terms like “culture fit”¹¹⁷ and “professionalism.”¹¹⁸** This language is often coded in that it assumes an unspoken standard for what constitutes the “correct,” “professional” style based on the communication and behavioral norms of the majority group. Companies can provide training to help rethink and replace coded language.
- **Introduce facilitators at hiring committee meetings to identify bias** or the use of statements like “culture fit” or “professionalism,” manage power differentials, interrupt groupthink, and ensure feedback discussions are substantive and specific. It is also advisable to have a guide to structure the post-interview debriefs that decide whether to hire a candidate.
- **Introduce a policy requiring diverse candidate slates for open roles.** A diverse candidate slate is an iteration of the Rooney Rule¹¹⁹ and ensures that at least 30% of candidates interviewed for any open role are from underrepresented groups. This rule is based on the finding among behavioral science researchers that if a hiring pool has just one woman or minority candidate, there is statistically no chance that they’ll get hired.¹²⁰

THE MANSFIELD RULE

The Mansfield Rule “measures whether law firms have affirmatively considered at least 30% women, lawyers of color, LGBTQ+ lawyers, and lawyers with disabilities for leadership and governance roles, equity partner promotions, formal client pitch opportunities, and senior lateral positions.”¹²¹ This rule is based on the finding among behavioral science researchers that if a hiring pool has just one woman or minority candidate, there is statistically no chance that they’ll get hired.¹²² **Researchers have found that members of underrepresented groups must make up at least 30% of the pool to disrupt bias.**

The Mansfield Rule requires firms to participate in regular knowledge-sharing during the course of a 12-month certification period, on the principle that by working collectively and sharing best practices and lessons learned, firms can move the needle faster than if they work in isolation to reach their goals. The results of implementing this rule have had a measurable effect on the legal industry. Among the 117 law firms that have adopted the rule:

1. **For underrepresented racial and ethnic lawyers, Mansfield 1.0 firms (early adopters of the rule) diversified their management committees** at more than *30 times* the rate of non-Mansfield firms during the 2017–2019 time frame. Non-Mansfield firms, on average, only saw an overall increase in management committee racial diversity of one-tenth of 1% (0.13%) over the same time frame.
2. **The racial and ethnic diversity of non-Mansfield firms’ partner nomination committees declined** since 2017, while Mansfield 1.0 firms *increased*, achieving an overall increase of nearly 4% during the 2017–2019 time frame. And, importantly, statistical modeling predicts this number will continue to climb for Mansfield firms.
3. **Racially diverse lawyers at early-adopter Mansfield firms are progressing into the partnership at a statistically higher percentage** than they were pre-Mansfield. 1.0 firms also leaped ahead of non-Mansfield firms during the 2017–2019 time frame. They reached 10.5% racially diverse partners in 2019, while non-Mansfield firms were at 9.1%. This variance is meaningful since all large law firms, on average, only increased by 0.2% each year with regard to racial diversity in their partnerships based on broader data from 2007–2019.
4. **Women lawyers at early-adopter Mansfield firms are progressing into leadership**—as part of management committees, partner review committees, and the partnership as a whole—at a statistically higher percentage than they were pre-Mansfield.

THE MANSFIELD RULE (CONTINUED)

In addition, of Mansfield 1.0 firms:

94% reported their candidate pool for pitch teams became more diverse.

79% reported their lateral partner hiring pool was more diverse.

76% said their equity partner promotions pool was more diverse.

57% elected or appointed a higher percentage of diverse lawyers into office managing partner roles.

Prior to participating in the Mansfield Rule, only 12% of firms tracked their candidates for leadership roles and 25% tracked their candidates for lateral partner hiring; now, 100% are tracking these candidate pools.

The tech industry should similarly adopt policies inspired by the Mansfield Rule.

D. Leverage organizations that develop talent from new sources and nontraditional talent pools.¹²³

- **Partner with local organizations** that act as talent scouts, working with traditionally disconnected talent to pursue careers in tech. This includes community colleges, workforce training institutions, and community-based organizations.
- **Invest in apprenticeships**/other paid training opportunities for traditionally disconnected populations and create a clear pathway to full-time employment. Track the conversion rate of interns to permanent hires by race, gender, and other underrepresented groups.
- **Invest in industry intermediaries** like LA-Tech.org,¹²⁴ PledgeLA,¹²⁵ and Reboot Representation¹²⁶ that can build out pathways into tech jobs in your company's local area. This type of investment builds social networks to mirror the organic ones that currently exist for many in the tech industry employees.

FIRST-GENERATION COLLEGE STUDENTS AS A PROXY FOR SOCIOECONOMIC STATUS

Project Basta is a nonprofit organization that aims to bridge the gap between employers and first-generation college students of color. They recommend tech companies do the following to make the industry more accessible to first-generation college students:

1. **Deprioritize or eliminate GPA** as an initial filter for candidates.
2. **Examine and expand short list of schools** to include campuses with high numbers of first-generation college students and pressure-test lists of preferred majors. Do those majors exist everywhere?
3. **Incentivize recruiters to think differently** and train them to evaluate a resume that may not include traditional markers of success. Consider allowing students additional ways to present themselves outside of a traditional resume (e.g., a short video or work product).
4. **Find internal champions outside of HR/diversity teams** (ideally, experts in the field for which they are hiring) and pilot recruiting experiments to create proof points. Don't be overwhelmed by the enormity of the problem. Instead, start small-scale with a willing team and introduce, for example, an experiment to interview a cohort of women in the tech organization using nontraditional methods (perhaps similar to a hackathon). Experiment. Iterate. Scale.
5. **To bridge the gap** between students who attend schools/majors that do a better job at preparing students for tech careers and those who don't, **provide all candidates with structured preparation opportunities ahead of interviews**, provide more transparency into the hiring process, and provide resources to bridge the gap of coursework that may be missing for students not attending those schools.

USE MARKETING TO CHANGE PERCEPTIONS ABOUT WHO BELONGS IN TECH

Many communities are unaware of the opportunities to work in tech companies, which means children in those communities—who are influenced by the media and their families—do not consider careers in tech.¹²⁷ Thoughtful and targeted advertising and employer brand campaigns may demonstrate a commitment to diversifying the tech workforce. Messaging should include not only possible jobs and careers, but also the pathways toward those careers, such as which middle and high-school courses will prepare them for relevant college majors.

- **Join with other tech companies to launch ad campaigns** that target specific markets, from print (e.g., magazines like *Highlights for Children*,¹²⁸ *Ebony*,¹²⁹ or *Latina Style*¹³⁰ for adults) to television (e.g., programming on Univisión¹³¹) to radio (e.g., WomensRadio¹³²), and in places like billboards, theaters, and public transportation systems.
- **Identify relevant and credible social media influencers** with large followings on platforms used by your target audience, and ask them to endorse content, such as blogs, or like a Facebook page with information about pathways to tech careers.
- **Help educators looking for role models to kindle interest** among their students. Create marketing materials showing employees in your company from diverse backgrounds to establish interest, confidence, and beliefs that students can be successful.¹³³ Sponsor a local or national radio or television station to share profiles of relevant careers and professionals (e.g., the NCWIT-Televisa Foundation TECHNOchicas program).
- **Sponsor students from undergraduate programs** from which you typically hire talent to visit classrooms and talk about what it's like to pursue a CS major.

TECHNOchicas—a partnership between NCWIT and media company Televisa's cultural division, the Televisa Foundation—is an initiative intended to broaden awareness among Latinas and Latinx families about opportunities and careers in tech. The campaign features stories about Latinas in tech that aired as part of talk shows, telenovelas, and radio broadcasts. Thousands of public service announcements have aired and been featured in broadcast television, local events, social media platforms, and online videos. TECHNOchicas ambassadors inspire Latina youth at events, workshops, and interviews, and organize outreach activities in their communities.¹³⁴

TECHNOchicas is funded by Apple, the Computing Alliance of Hispanic-Serving Institutions (CAHSI), Dell EMC, Google, Microsoft, Sphero, and Univisión.

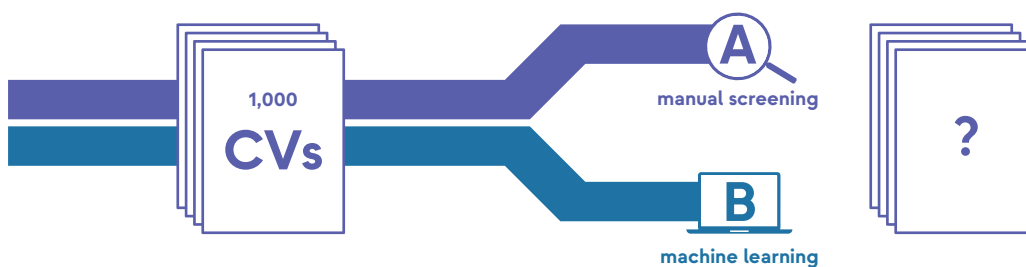
E. Use over-the-counter algorithmic hiring products with caution and only

under certain conditions. Machine learning (ML) is a subset of artificial intelligence (AI), and enables computers to learn how to solve problems or complete tasks by themselves. ML has recently become commonplace in recruiting tools—almost every Fortune 500 company uses some type of ML. From a DEI perspective, this technology offers both the opportunity to root out human bias, and the risk of automating and amplifying it. Research demonstrates that automated hiring systems often discriminate against women, military veterans, formerly incarcerated people, people with disabilities, and others.¹³⁵ Optimizing for fairness throughout the talent-recruiting pipeline is arguably the most important defense against algorithmic bias in recruiting.

A key problem with ML is that it's frequently a "black box." This means ML takes input data and produces outputs without showing the steps or rationale that lead to a decision. Moreover, these inputs are based on data that reflects how things are—which means the machine is learning our existing biases and replicating them. Without transparency, it's extremely difficult to ensure algorithmic hiring is unbiased. Some explainable AI using LASSO methods and decision trees avoids this. When HR departments don't use explainable AI, we recommend they run relatively simple A/B product testing when introducing ML into recruitment processes. For example, before signing up wholesale to any new ML tool to screen resumes and CVs, HR teams should conduct analytical comparisons.

The recruiting team should manually screen 1,000 CVs, then feed the same 1,000 CVs through the proposed ML recruiting screen. Compare the CVs that successfully pass the screen test for demographic outcomes (e.g., women or underrepresented groups). What are the differences in DEI outcomes when the screen is completed by humans or ML? Remember, there is both human and algorithmic bias—both require oversight and insight.¹³⁶

TESTING RECRUITMENT MACHINE LEARNING FOR BIAS



In summary, we suggest using ML and AI recruiting products with caution. Be aware of legal and statistical precedents to ensure algorithmic fairness, and proactively work to combat AI-generated bias.¹³⁷ Also be aware of questionable marketing claims used to sell unproven and sometimes unethical AI recruiting products to HR teams.¹³⁸ We recommend reviewing the Brookings Institution's brief¹³⁹ on AI, and Deloitte's Trustworthy AI Framework¹⁴⁰ ([SEE ACTION 5.3](#) for how to address potential bias in your AI and ML technology).

4.3. DESIGN TALENT DEVELOPMENT, FEEDBACK, AND PROMOTION SYSTEMS TO MINIMIZE BIAS AND REWARD INCLUSION.

A. Reduce bias

- **To reduce bias in performance rating instruments**, companies should use standard and specific rubrics and checklists for evaluation, and ensure that those rubrics are not themselves based on gendered or racialized notions of what constitutes good leadership.
- **To reduce bias in the performance review process**, companies can use multiple sources of feedback (e.g., 360-degree evaluations) and formal practices rather than vague impressions. Examples include the evidence-based Structured Free Recall Intervention and having manager-peers review each other's name-redacted evaluations (see [NCWIT's Talent Management Supervising-in-a-Box](#)¹⁴¹).
- **To reduce bias in group discussions around performance**, companies can use facilitators or take other actions to avoid groupthink, support genuine deliberation, and work against the inhibiting effect of power and personality differences.

TOOL KIT [↗](#)

NCWIT

[Reducing Unconscious Bias in Performance Review Instruments \(Checklist\)](#)

[Reducing Unconscious Bias When Conducting Performance Reviews \(Checklist\)](#)

[Tips for Reducing Bias in Performance Evaluation](#)

PERFORMANCE REVIEWS AND PROMOTIONS

Bias in performance evaluations negatively impacts the career advancement prospects of women and people of color in myriad ways. For example, research about Harvard Business School graduates found that women and people of color receive less frequent and lower-quality feedback than majority group members.¹⁴² Often, this arises from a manager's well-intentioned fear of saying the wrong thing or appearing overly harsh.

The result is that women and people of color lose the opportunity to improve their performance. Compared to their male peers, women get feedback that is less precise, contains less constructive criticism and more negative remarks about their personalities, is not connected to objective and observable business outcomes, and is therefore harder to act on.^{143, 144}

Moreover, women are criticized while men are praised for the same behavior, and they face a double-bind wherein they are more likely to be deemed “unlikable” and otherwise penalized when they demonstrate competence and success.¹⁴⁵ In women's evaluations, success is attributed to luck or team effort more often than it is in men's evaluations.¹⁴⁶

Even some types of self-evaluation are less fair to women and people of color. Self-promotion tends to be an unquestioned part of performance evaluation, but as Siri Chilazi, a research fellow at Harvard Kennedy School points out:

“Women¹⁴⁷ and people of color¹⁴⁸ tend to evaluate their performance less favorably than equally performing men and White people, respectively. Self-promotion can also lead to social costs for women.”^{149, 150}

NCWIT's “Unconscious Bias, Performance Evaluation, and Promotion Fact Sheet”¹⁵¹ highlights more findings from the vast body of research on this topic, and explains how unconscious bias is more likely under certain conditions.

B. Value and reward inclusion

- **Ensure performance evaluation criteria and weighting systems** reflect that DEI is as important as other business imperatives. For example, introduce a specific assessment for all employees to evaluate their contribution to making the company more diverse and inclusive, which can take into account ERG leadership and/or their contribution to representation, hiring, and other DEI goals.
- **Define attributes of inclusive behavior** and evaluate managers against these behaviors.
- **Link team members' compensation to demonstration of inclusive leadership** and make demonstration of inclusive leadership skills a prerequisite for promotion.

4.4. REDUCE BIAS IN TASK ASSIGNMENT AND WORK ALLOCATION. INTRODUCE A PROCESS TO SPREAD STRETCH ASSIGNMENTS BEYOND FAVORED GROUPS.¹⁵²

- A. Ensure that people from underrepresented groups have access and support to take on stretch assignments and high-visibility projects.
- B. Engage in NCWIT's suggested steps to support development, including:
 - **Assess selection criteria and curriculum**¹⁵³ for high-potential employee or leadership development programs.
 - **Consciously increase opportunities** for people from underrepresented groups to have greater visibility for their work.¹⁵⁴
 - **Establish patenting learning communities**¹⁵⁵ to make patenting processes transparent¹⁵⁶ and increase diverse innovation. Patenting rates among women are extremely low. Patenting learning communities are organized groups where members can access advice and support to increase participation of women in the process.
 - **Counteract stereotype threats and other biases** by actively encouraging underrepresented employees to take on new roles and growth assignments.¹⁵⁷

CAREER DEVELOPMENT AND ADVANCEMENT: WORK ALLOCATION

People can build their talents through exposure and stretch assignments. Unfortunately, extensive research on what's known as "performance support bias"¹⁵⁸ has shown that supervisors often allocate work in a way that results in women¹⁵⁹ and people of color¹⁶⁰ having fewer stretch or challenging opportunities and experiences that are critical for career progression.¹⁶¹ Moreover, women are more likely to be asked to do, and to volunteer for, non-promotable tasks that take time away from promotable work.^{162, 163}

TASK ASSIGNMENT ASSESSMENT

NCWIT Task Assignment Toolkit¹⁶⁴ recommends asking the following:

1. Are some team members assigned more frequently to highly visible tasks or projects?
2. Are other talented team members missing out on these assignments, perhaps because they are quieter or because their potential has been overlooked?
3. Are some team members more frequently assigned to high-risk projects? Why or why not? Examine criteria used for assigning tasks.
4. Make explicit your criteria for assigning tasks for each project and ensure they are relevant to those projects. For example, supervisors sometimes avoid assigning important projects to team members who work flexible hours, even if that schedule would not impair their ability to do the job.

TOP TIPS

- Watch for patterns where team members perform stereotypically gendered roles. Research illustrates that women more frequently take notes or take on “office housework” (e.g., organizing logistics, social events, etc.).
- Avoid or interrupt comments like “women are more social” or “men are better problem-solvers.” These comments reflect a misunderstanding of gender-difference research and exaggerate its findings.
- Avoid the glass cliff phenomenon of giving projects that are more likely to fail to employees from underrepresented groups.

4.5. IMPROVE SPONSORSHIP, ALLYSHIP, AND MENTORSHIP OPPORTUNITIES, AND ENSURE THE OPPORTUNITIES YOU PERSONALLY PROVIDE ARE BALANCED AMONG DIFFERENT COMMUNITIES.

A. NCWIT found that women tend to be over-mentored and under-sponsored.

The distinction is important because,

“Mentoring helps traverse the organizational maze but sponsoring helps to change it.”¹⁶⁵

In short, mentors advise, while sponsors use their social capital to actively cultivate opportunities for sponsorees. Senior leaders can serve as role models, open doors to new opportunities, offer support during setbacks, and provide honest feedback.^{166, 167}

B. Leaders in mentor and sponsor roles should receive training and resources

to play these roles effectively, and must be in a position to champion and advocate on behalf of their mentees/sponsorees. It’s important that companies recognize and reward employees who play these important roles by making it part of their performance evaluation.

4.6. USE ERGS TO SUPPORT EMPLOYEE DEVELOPMENT, CREATE COMMUNITY, AND CONTRIBUTE TO BUSINESS OBJECTIVES, BUT NOT AS A SUBSTITUTE FOR A DEI STRATEGY.

ERGs and Business Resource Groups (BRGs) contribute to substantial DEI outcomes and—if their voice is valued—can create innovative product solutions. The cultural impact of successful ERGs cannot be overstated. Underrepresented groups in tech often report that it is *only* the community created by their respective ERGs that enables them to stay at a company. ERGs also provide people from underrepresented groups with opportunities to develop their leadership and technical skills by giving them visibility to leadership and the C-suite they may not have in their day jobs. ERGs are often significant repositories of untapped business knowledge, but typically lack budget, resources, authority, and allies, leaving members to feel that they are taking on additional work for little or no professional reward.¹⁶⁸ Therefore, ERGs should be properly resourced with structured lines of communication to leadership.

Consider the following when looking to strengthen the position of ERGs in your company:

- A. Support your ERGs** with sufficient resources (budget) and skills training. Provide ERG leads with access to leadership development programs.
- B. Allocate an executive sponsor** to each ERG, who can advocate for ERGs at a leadership level.
- C. Ensure that ERG leads have face time** with the executive team, ideally on a quarterly basis.
- D. Recognize and reward employees' contributions** to ERGs in performance reviews and/or by compensating ERG leads with an annual equity award.
- E.** Where appropriate, **link ERG objectives to company DEI strategic outcomes.**
- F. Create avenues for ERGs to voluntarily contribute** to business and product initiatives without transferring accountability to them. (Accountability must still remain with the relevant business team.)

4.7. EVALUATE WHAT WORKS AND WHAT DOES NOT, AND ITERATE ACCORDINGLY.

It is in the tech industry’s DNA to test and evaluate products to see what works, learn from what doesn’t, pilot, and iterate. To stay ahead, the tech industry must apply its characteristic rigor to the practices, procedures, and product innovation that will drive DEI outcomes—and then share what worked and what didn’t.

AI is an obvious place to apply A/B testing and evaluation methods. For example, instead of just rolling out a new AI tool to all, one company ran all applicants through their traditional system and, in parallel, through an AI tool they were considering. They learned that the AI tool decreased the diversity of the finalists, so the company decided not to use it. Any new hiring protocol or performance appraisal should be tested to see if it works for *all* groups or whether it impacts groups differently.

Evidence suggests that A/B tests on various HR practices and procedures can yield important insights that help improve DEI outcomes.¹⁶⁹ One A/B test on the information provided to job applicants found that when employers indicated that pay was negotiable, the typical gender gap in pay disappeared. Many women fear that they violate a social norm when negotiating—unless invited to do so. Therefore, if a company wants to close the gender pay gap, they should be transparent about what is negotiable.¹⁷⁰

Another A/B test found that the number of attendees impacted a workshop’s efficacy. In a workshop designed to increase awareness of gender bias in academic medicine, science, and engineering, and motivate people to habitually promote gender equity, it was important that a critical mass attend.¹⁷¹

A/B tests of interventions to decrease microaggressions,¹⁷² increase women’s representation in senior roles,¹⁷³ take bias out of standardized tests such as the SAT,¹⁷⁴ and even diversify Nobel laureates¹⁷⁵ resulted in concrete lessons about what works. **The industry doesn’t need to reinvent the wheel.** There are plenty of resources on how to conduct an A/B test in organizations, and evidence on what works is increasing as more organizations start to evaluate and share their learnings.^{176, 177, 178} The tech industry should prioritize this kind of testing and evaluation for DEI going forward.

TOOL KIT [↗](#)

MENTORSHIP AND SPONSORSHIP

[NCWIT: Mentoring-in-a-Box Guide](#)

[NCWIT: Sponsorship Toolkit](#)

ERGS

[Indeed’s Guide to ERGs](#)

[Interview with Diversity Consultant Leah Kiayo](#)

[Mercer Report ERGs Come of Age](#)

DISABILITY:IN FACT SHEETS

[BRG Ableism/Audism](#)

[BRG Executive Sponsor Role](#)

[BRG Facility Access](#)

[BRG Intersectionality](#)

CONTEXT (ROOT CAUSES AND THE WHY)

ERGs have their roots in the Civil Rights Movement in the United States. In 1964, the former CEO of Xerox, Joseph Wilson, came up with the idea in collaboration with Black employees in response to the race riots that occurred in Rochester, New York, where Xerox was headquartered. In 1970, Wilson and Xerox’s Black employees launched the National Black Employees Caucus to create a space for Black employees to discuss their experiences and advocate for change within their company. This caucus was the country’s first official ERG.¹⁷⁹

Since then, ERGs—also known as Affinity Groups or Business Resource Groups (BRG)—have been providing community and advocacy for underrepresented groups in companies across industries. Today, some ERGs have objectives that directly connect with advancing their company’s business goals.

RECOMMENDATIONS FROM DISABILITY:IN

The U.S. unemployment rate for people with disabilities is almost double that of those without disabilities. Worldwide, there are over 1 billion people with disabilities, of which 386 million are working age—and **their unemployment rate is as high as 80% in some countries.**¹⁸⁰

1. Cultural change requires sustained, visible leadership to create a workplace that embraces people with disabilities and values the creativity and innovation that result from a truly diverse workforce.
 - **Promote visible CEO commitment** through avenues such as the CEO Letter on Disability Inclusion.¹⁸¹
 - **Intentionally include disability** on a company's diversity statement and diversity annual report.
 - **Assign an executive sponsor** for disability inclusion initiatives.
 - **Establish an Office of Accessibility** that works closely with the Diversity Department to drive efforts and increase transparency and accountability across the company.
 - **Embed disability inclusion** across the enterprise through cross-functional teams led by an empowered project manager who is an internal disability inclusion champion.
2. Use benchmarking tools like the Disability Equality Index¹⁸² to celebrate accomplishments and identify opportunities for improvement in advancing disability inclusion across the company.
3. Ensure employment practices fully incorporate and include individuals with disabilities:
 - **Require mandatory annual training** for managers and employees on disability inclusion.
 - **Offer well-publicized and effective centralized accommodations policies** and practices for applicants and employees.
 - **Ensure facilities and emergency-evacuation procedures** consider the needs of people with disabilities.
 - **Engage in targeted creative outreach** and recruitment initiatives for candidates with disabilities. Establish partnerships with dedicated sourcing channels.
 - **Allocate a disability strategist** and/or disability talent acquisition-focused role to elevate the importance of a diverse workforce that includes veterans and individuals with disabilities.
 - **Provide retention and advancement programs** to address the unique needs of individuals with disabilities. Engage with BRG/ERG members to determine mentoring programs, benefits offerings, flexible workplace components, and accommodations offerings that support employee retention.
 - **Ensure employees with disabilities are included in internal development programs** such as rotational, high potential, leadership development, and succession plans.

RECOMMENDATIONS FROM DISABILITY:IN (CONTINUED)

4. Set specific company-wide disability hiring goals and hold executive leadership accountable for meeting them with the same accountability mechanisms used for other hiring goals.
5. Ensure disability inclusion practices are implemented in global operations to demonstrate worldwide commitment, while also addressing country-specific disability hiring quotas.
6. Engage with industry peers through programs such as Disability:IN Inclusion Works¹⁸³ to learn best practices and encourage cohort comparisons and friendly competition.

DISABILITY:IN RESOURCES¹⁸⁴

- [Getting Started with Disability Inclusion—Disability:IN’s checklist of best practices](#)
- [2020 Disability:IN’s Disability Equality Index Report](#)
- [Disability Inclusion Global Best Practices Report](#)
- [Disability Fundamentals Training for Managers](#)
- [Disability Etiquette—A Starting Guide](#)
- [Disability Inclusion Employment Best Practices](#)
- [Autism @ Work Playbook](#)
- [Centralized Reasonable Accommodations Fund](#)
- [Disability Inclusion Posters](#)

ACTION 5

Apply both a DEI framework and an ethical framework to the design of products and services.

The tech industry is not alone in its responsibility to address long-standing inequity, but it is disproportionately powerful and influential far beyond its own workforce. The tech industry's products, tools, and services help determine the news we consume and share; whether we get a mortgage or job interview; the quality of medical care we receive; how and with whom we communicate—indeed, the very foundations of democracy. Therefore, the industry must take great care in the design of products and technology that have an outsize impact.

This section provides a starting point for how tech companies can think about applying a DEI framework to their products and services. Each company must take its own path, but the goal is the same: to be more inclusive at every stage of product development. Although tackling online harm (including hate speech, cyber bullying, harmful online content, child sexual exploitation, and many other forms of cyber abuse) is beyond the scope of this report, it is clear that companies must introduce a holistic approach to bias mitigation and harm reduction in their products, business models, and decision-making. Moving forward, responsible innovation will apply ethics-based and human-rights approaches to every stage of the process, including initial design, customer experience, and societal impact.

HIGH LEVERAGE POINTS

MIDDLE MANAGERS

PRODUCT INCLUSION

CHANGE AGENTS



C-SUITE LEADERS



MANAGERS



TEAM MEMBERS



START-UPS

IN SUMMARY

- 5.1. Develop product inclusion principles and operationalize them throughout the product development process.
- 5.2. Prioritize accessibility in your products.
- 5.3. Address potential bias in your artificial intelligence (AI) and machine learning (ML) technology.
- 5.4. Consider how your company can mitigate harm from the application of your technology.
- 5.5. Increase representation and disrupt stereotypes in your original content, marketing, and advertising.

THINK BROADLY ABOUT PRODUCT INCLUSION

You don't have to manage a product to think about product inclusion. If you are not sure where to begin, first examine the institutions in which your product or service exists, identify the systemic barriers that exist within those institutions, and then proactively address them.

For example, many tech companies—from lenders to real estate to insurance—rely on credit scores. But what many teams don't consider is the well-documented effect of generations of racial bias on credit scores, and how that systemic bias might be affecting users.¹⁸⁵ Therefore, any product that relies on credit scores has an opportunity to apply an inclusion lens to their work.¹⁸⁶

Every product and service connects to larger institutional barriers. For example, if your company focuses on education, consider how inequitable funding of public schools impacts your customer and product. Or perhaps your product inadvertently treats customers who have been through the justice system differently. When product managers actively consider barriers in the systems where their products operate, they can develop a DEI lens and apply their understanding to their businesses.

How to do it

5.1. DEVELOP PRODUCT INCLUSION PRINCIPLES AND OPERATIONALIZE THEM THROUGHOUT THE PRODUCT DEVELOPMENT PROCESS.

Product inclusion¹⁸⁷ is about creating products and services that reflect the world around us. This is a shift from the standard but outdated practice by tech companies of optimizing products and experiences for a narrow set of users. As a consequence, products gravitate toward the average, and tend to work well for majority groups and not as well for underrepresented groups. But,

“Average is not very meaningful when it comes to human beings, because it is normal to be different. Diversity is the norm and good design has to respond to that diversity.”¹⁸⁸

It’s important to co-create and collaborate when building products that will be used by others. In order to ensure you’re bringing in perspectives from historically underrepresented users, look end-to-end at your product design and development process.

The first step is to develop the product inclusion principles that are best for your company. If your company already uses a larger ethical decision-making framework, ensure inclusion is a core principle in that framework.

The Head of Product Inclusion at Google and Founder of the Equity Army, Annie Jean-Baptiste, suggests that product inclusion should focus on three principles:

ADDRESS THE USER:

Consider race, gender, age, education level, ability, geographic location, and other dimensions of diversity when developing a product.

START WITH EQUITY:

Inclusion shouldn’t be an afterthought. Make sure that underrepresented voices are being heard throughout the product development process.

CONTINUALLY TEST:

To ensure products are inclusive, keep researching and testing ([SEE ACTION 4.7](#)).

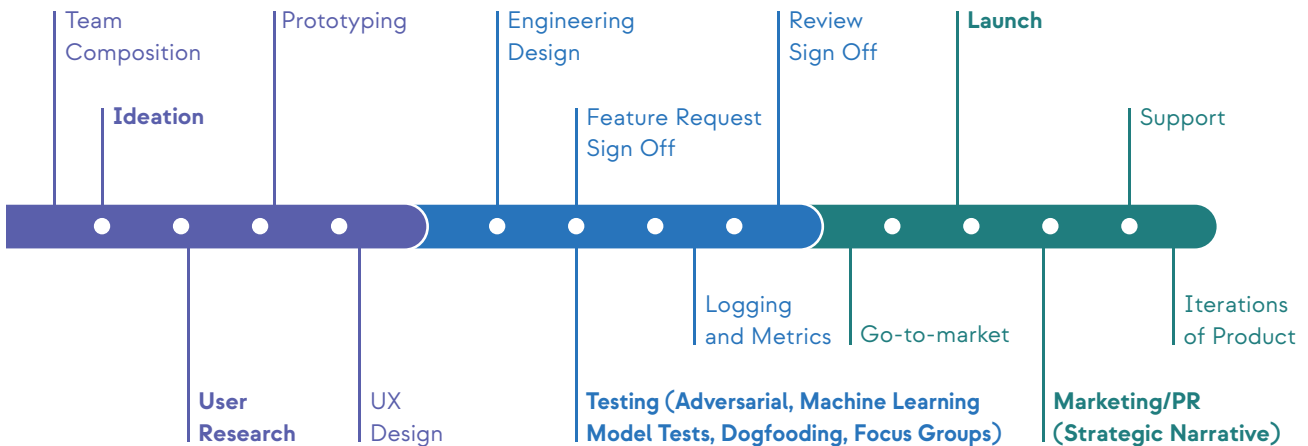
Incorporating the perspectives and user experiences of underrepresented groups will optimize the experience for everyone. For example, take the small ramps built into curbs to allow smoother passage onto a sidewalk. They were initially designed for wheelchair users, but now they benefit everyone from parents pushing strollers to cyclists.¹⁸⁹ When products are designed for those most excluded, they often improve the experience for many others. Moreover, once inclusive technology is widely used, it becomes normalized.

After codifying your product inclusion principles, you need a deliberate strategy for operationalizing those principles. At every point in the product development process—from ideation, to user research and design, to user testing and marketing—consider who else needs to be consulted and included. These principles must be grounded in a cross-company commitment and accountability at all levels.

Product inclusion is an end-to-end system and requires intentionality at each stage of the process. The diagram below identifies the highest leverage points that are key to successful, inclusive outcomes.

PRODUCT INCLUSION IS AN END-TO-END SYSTEM

While all inflection points in the process are important, Ideation, User Research, Testing, and Marketing (Strategic Narrative) are key to successful, inclusive outcomes.



Ideation, User Research, Testing, and Marketing have yielded results in practice and are our likely research focus areas.

IMAGE SOURCE: Annie Jean-Baptiste, Google.

5.2. PRIORITIZE ACCESSIBILITY IN YOUR PRODUCTS.

Technology can be a game-changer for people with disabilities, many of whom rely on accessible devices, websites, and apps to do everything from ordering groceries to applying for jobs. Tech companies can create truly inclusive digital experiences that enhance people's quality of life and break down barriers that keep people with disabilities from achieving their full potential.

- A. Audit and enhance compliance** of internal and external websites under World Wide Web Consortium's Web Content Accessibility Guidelines 2.1 (W3C WCAG 2.1).¹⁹⁰ These guidelines provide comprehensive principles, guidance, and success metrics for making web content (across devices and platforms) more accessible to people with disabilities. The A11Y Project Checklist¹⁹¹ can help you check your WCAG compliance.
- B. Test your content** with users who understand how people with different types of disabilities use technology, and include users with disabilities in test groups when performing human testing.¹⁹²
- C. Include accessibility** in your inclusive-design principles and seek cross-disability community input to ensure company products and/or services are accessible to both employees and customers with disabilities.

POUR—THE FOUR PRINCIPLES OF ACCESSIBLE WEB CONTENT

WCAG's approach to creating accessible web content is based on four foundational principles: *perceivable*, *operable*, *understandable*, and *robust* (POUR). The guidelines provide detailed guidance on each of these, but W3C provides the following summary on its website:¹⁹³

PERCEIVABLE

- Provide [text alternatives](#) for non-text content.
- Provide [captions and other alternatives](#) for multimedia.
- Create content that can be [presented in different ways](#), including by assistive technologies, without losing meaning.
- Make it easier for users to [see and hear content](#).

OPERABLE

- Make all functionality available from a [keyboard](#).
- Give users [enough time](#) to read and use content.
- Do not use content that causes [seizures or physical reactions](#).
- Help users [navigate and find content](#).
- Make it easier to use [inputs other than a keyboard](#).

UNDERSTANDABLE

- Make text [readable and understandable](#).
- Make content appear and operate in [predictable](#) ways.
- Help users [avoid and correct mistakes](#).

ROBUST

- Maximize [compatibility](#) with current and future user tools.

5.3. ADDRESS POTENTIAL BIAS IN YOUR ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING (ML) TECHNOLOGY.

As the Algorithmic Justice League puts it,

“Unchecked, unregulated and, at times, unwanted, AI systems can amplify racism, sexism, ableism, and other forms of discrimination.”¹⁹⁴

Therefore, any company that wants to de-bias its technology must take a rigorous and cautious approach to introducing AI without A/B testing ([SEE AI IN RECRUITING](#)). Machine learning learns from existing data, which means that if a data set is based on a White majority, the product evolves based solely on that information and can discriminate against those outside that data set.

In addition to establishing policies to proactively mitigate algorithmic bias, companies must ensure that the researchers and engineers building these systems are diverse on multiple dimensions. A Columbia University study found that,

“The more homogenous the [engineering] team is, the more likely it is that a given prediction error will appear.”¹⁹⁵

Homogenous teams with similar backgrounds are often unaware of the problems facing underrepresented groups, leading to the unconscious introduction of bias into AI systems.

GLAAD’S RECOMMENDATIONS FOR HOW TO MAKE SOCIAL MEDIA SAFER FOR LGBTQ+ USERS

GLAAD released its [Social Media Safety Index](#) in May 2021, outlining general recommendations relevant to social media platforms around LGBTQ+ self-expression, privacy and outing, and mitigating anti-LGBTQ+ hate.¹⁹⁶



KEY TAKEAWAYS

- **Stop allowing algorithms** to fuel extremism, disinformation, and hate.
- **Similarly, confront the problem of bias in AI**, which disproportionately impacts LGBTQ people and other marginalized communities. Consider using more human moderators who are appropriately trained to identify cultural biases.
- **Make it easier for users to report problematic content**, and be transparent in content moderation.
- **Employ a dedicated LGBTQ policy lead**, and take leadership in civil discourse.
- **Respect data privacy**, especially where LGBTQ people are vulnerable to serious harm and violence.
- **Only select platforms currently take action on violent speech and misinformation**, usually by monitoring trending topics for misinformation, restricting hashtags or shares, or posting labels on misinformation. When it comes to anti-LGBTQ misinformation, enforcement is arbitrary at best.

MITIGATING BIAS IN AI: HAAS SCHOOL OF BUSINESS AT UC BERKELEY

To go beyond general guidelines, the Center for Equity, Gender, and Leadership (EGAL) at the Haas School of Business at the University of California, Berkeley released a playbook that provides a comprehensive bias in AI map and notes specific actions that business leaders can take to effectively mitigate bias in AI technology. The playbook outlines “strategic plays” in three areas:

TEAMS

- Enable diverse and multidisciplinary teams to research, develop, operationalize, and manage algorithms and AI systems.
- Promote a culture that encourages employees to prioritize equity throughout the process of developing AI. Be transparent about shortcomings.

AI MODEL

- Practice responsible data set development, including by gathering inclusive data.
- Establish policies and practices that actively check and mitigate bias in algorithm development.

CORPORATE GOVERNANCE AND LEADERSHIP

- Establish corporate governance for responsible AI and end-to-end internal policies to mitigate bias.
- Engage corporate social responsibility (CSR) teams to advance responsible AI and larger systems change.
- Use your voice and influence to advance industry change and regulations for responsible AI.

For more information and how-to guidance on the strategic plays, as well as quick wins to take advantage of, explore the playbook from the Berkeley Haas School of Business.¹⁹⁷

Also see the Algorithmic Justice League’s Equitable and Accountable AI.¹⁹⁸

5.4. CONSIDER HOW YOUR COMPANY CAN MITIGATE HARM FROM THE APPLICATION OF YOUR TECHNOLOGY.

It’s not enough to consider DEI throughout the development of a product and service and then simply drop it into the world with no accountability for its effects. Tech companies must also anticipate and then mitigate the harm that their technology might cause, not only to individuals or marginalized groups but to society at large. For example, tech companies that create platforms must think about moderating content that causes harm to specific groups, or might even risk public health or trust in democracy (e.g., the proliferation and spread of conspiracies and fake news), and consider limiting the reach of individuals who are causing that harm.

Moreover, tech companies must consider who uses their technology and products, and to what end. Is an authoritarian country using surveillance technology to oppress an underrepresented or marginalized group or, conversely, demanding changes to a product as a means of repression? It’s not possible to anticipate every dilemma tech companies will face—but it is possible to develop clear and transparent ethical guidelines that have internal buy-in and can be deployed when wrestling with difficult ethical questions.

For example, Microsoft developed what they call Responsible AI, which is their framework for advancing AI using clearly articulated ethical principles. One result is that the company limits the use of its facial-recognition technology by police because of concerns that the technology is less accurate with darker skin tones and could lead to people being unfairly arrested.

TOOL KIT [↗](#)

Another example is [#Beyond the Statement: Tech](#), which calls on tech companies to evaluate products for discrimination against groups, or their impact on civil rights.

WORLD ECONOMIC FORUM AND BSR'S FRAMEWORKS FOR RESPONSIBLE INNOVATION

The World Economic Forum, in partnership with BSR, released a framework for responsible innovation that combines ethics-based and human-rights approaches and applies them at every stage of the process, from initial design to customer experience. The framework breaks down the life cycle of disruptive technology into three main phases:

1. **How they are designed** and developed.
2. **How they are deployed** and who they are sold to.
3. **How they are applied** and used by an individual or entity other than the original creator.

At every phase, companies should be intentional about incorporating ethics and human rights-based approaches, and be clear about who is responsible at each step.

ETHICS-BASED APPROACHES

- A framework for decision-making in situations where right and wrong, good and bad, are not clearly defined.
- Address issues of fairness and social justice where different schools of thought and ethical standards exist—when various choices can be made and different paths can be chosen.
- Different traditions, cultures, countries, and religions may choose different outcomes and priorities suited to specific needs and sensitivities.

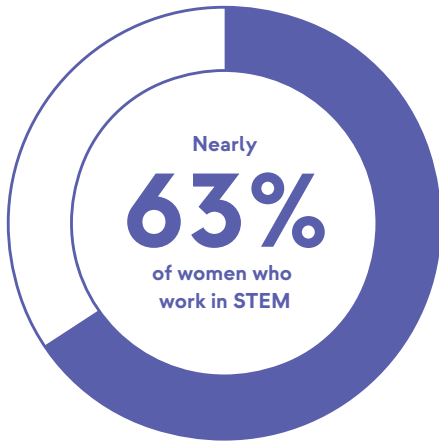
HUMAN RIGHTS-BASED APPROACHES

- A focus on the experiences of the most vulnerable, and a holistic recognition of what all members of society need in order to live with dignity and thrive.
- Based on internationally recognized laws and standards; a common standard of achievement for all people. Established rights that should always be protected and respected.
- A minimum threshold and baseline expectation for the responsible use of disruptive technology.
- An internationally endorsed framework for defining company responsibility that considers the critical role of governments.

Excerpt from World Economic Forum & BSR. (2019). [Responsible Use of Technology \[White Paper\]](#).¹⁹⁹

5.5. INCREASE REPRESENTATION AND DISRUPT STEREOTYPES IN YOUR ORIGINAL CONTENT, MARKETING, AND ADVERTISING.

Representation in media matters. The stories companies choose to tell and the faces and voices they choose to highlight send a message to consumers and candidates about who matters most. Those stories also have the ability to reinforce or disrupt existing stereotypes. For example, nearly two-thirds (63%) of women who work in STEM say the character of Dana Scully from the 1990s television show *The X-Files* served as their role model.²⁰⁰



say that the character of

DANA SCULLY

from *The X-Files* served as their role model.



Photo courtesy of Twentieth Century Fox Film Corporation.

Using your communications platforms to include talent from underrepresented groups has the dual objective of increasing the diversity of your marketing assets, while also rooting out stereotypes from your own work.

- A. Originate creative concepts and stories** from a diverse group of creators (above and below the line).
- B. Use agencies that promote diverse creators,** storytellers, and both on- and off-screen talent.
- C. Introduce content and/or commissioning guidelines** to help content creators incorporate DEI during concept development, filming, and/or asset creation:
 - Include guidance to address underrepresentation on-screen in lead and secondary characters, portrayal of characters from underrepresented groups and their role in primary and secondary story lines, themes or narratives, casting choices, and project location (e.g., see the British Film Institute’s Diversity Standards).²⁰¹
 - Consider the diversity of your own off-screen creative leadership and associated project teams.
- D. Train your content team and agencies** to be aware of stereotypes and intentionally manage positive portrayals of all people.
- E. Consider auditing your marketing assets,** advertising material, and other media content to understand who is and isn’t represented in your content.

TOOL KIT [↗](#)

ACCESSIBILITY

[The A11Y Project Audit Checklist](#)

[Accessible by Design](#)

[Disability:IN’s Accessible Technology Procurement Toolkit](#)

[Disability:IN’s Digital Accessibility Statement Best Practices](#)

PRODUCT INCLUSION

[The Business Case for Product Inclusion Design Practices](#)

[Inclusive Toolkit Manual](#)

[What is Inclusive Design? A Beginner’s Guide](#)

FAIR AI

[AI Fairness 360 by IBM](#)

[Algorithmic Justice League: Equitable and Accountable AI](#)

[Berkeley Haas: Mitigating Bias in Artificial Intelligence](#)

[PredictiveHire’s FAIR framework](#)

For information [SEE ACTION 4](#) and [PredictiveHire’s FAIR Framework](#)

ETHICAL AND RESPONSIBLE INNOVATION

[Berkman Klein Center Projects and Tools](#)

[Ranking Digital Rights](#)

[“Responsible Use of Technology” by World Economic Forum and BSR](#)

CREATOR DIVERSITY AND REPRESENTATION IN MEDIA

[Girlgaze](#)

[Free the Work](#)

[Unstereotype Alliance](#)

THE UNSTEREOTYPE ALLIANCE “3PS” FRAMEWORK FOR MARKETING COMMUNICATIONS

The Unstereotype Alliance created a simple framework to help develop and evaluate creative content for progressive portrayals of all people. The guidance is designed to eradicate harmful stereotypes and bias throughout the entire creative process. It features three Ps—*Presence, Perspective, and Personality*—and includes questions that can serve as a checklist of considerations when creating and evaluating content.

PRESENCE: FOCUSES ON WHO IS BEING FEATURED IN THE AD

Many kinds of people are completely absent from communications—and to see your own image entirely erased in the culture that surrounds you is deeply disempowering.

- Who is portrayed in the communication? Who is the central character?
- Does the communication feature a range of people that are representative of the cultural and ethnic mix in the market?
- Do the characters go beyond being a ‘mannequin’ for the product?
- Has the character been taken into consideration in the context of the copy, clothing, positioning, naming, etc.?

PERSPECTIVE: FOCUSES ON WHO IS FRAMING THE NARRATIVE

Who seems to be directing the action? Who is the person whose perspective is represented?

- Do we see the personal experience and perspective of the character?
- Who is driving the narrative?
- Is there any objectification or sexualization?
- Is this work challenging outdated perspectives in society about people/communities/relationships/norms?

PERSONALITY: FOCUSES ON THE DEPTH AND AGENCY OF THE CHARACTER

Characters should have three-dimensional personalities that feel authentic—funny, caring, strong, thoughtful, and respected.

- Do the characters come across as empowered and in control of their lives?
- Do the characters have three-dimensional personalities?
- Is beauty a dimension of personality rather than just about physical appearance and attraction?
- Is there a stereotypical interpretation of beauty?

CASE STUDY: AMAZON STUDIOS' INCLUSION POLICY AND PLAYBOOK

In 2021, Amazon Studios introduced an [Inclusion Policy](#)²⁰² and [Inclusion Playbook](#)²⁰³ to improve representation both on camera and behind the scenes. The Inclusion Policy lays out Amazon Studios' expectations for its internal teams and creative partners. It aims to tell stories that amplify the voices of characters across the spectrum of diversity—including race, ethnicity, nationality, sexual orientation, age, religion, disability (including mental health), body size, gender, gender identity, and gender expression. It also aims to create an inclusive production environment. The policy covers developing stories and characters, hiring and production, reporting and documentation, and a commitment to accountability. Amazon Studios will track data to hold itself and its partners accountable.

The Inclusion Playbook is a practical guide for the company and its partners on how to make good on these commitments by minimizing and disrupting biases at every step of the production process.

People who engage with the Playbook will learn to:

- Make inclusive decisions, while telling authentic stories and hiring the best people for the job.
- Know where to go for help, including tools to make inclusive decisions.
- Identify criteria for making informed and consistent creative choices.
- Foster curiosity and ask questions to disrupt the status quo about how things are done or expectations about what storytellers want/do not want.

As part of this work, Amazon suggests “10 Gut Questions” to ask in any storytelling project:

1. Are we celebrating people of different ages, body types, skin colors, orientations, ethnicities, identities, and disabilities?
2. Do we showcase customers in a variety of relationships and roles?
3. Is there a diverse character for a primary role (e.g., speaking role vs. background)?
4. Does the diverse character feel tokenized or “othered”?
5. Is the diverse character defying stereotypes and respecting life experiences?
6. Is the diverse character in a position of empowerment?
7. Have we highlighted different environments, from urban to rural?
8. Have we represented people from different socioeconomic backgrounds?
9. Any cultural appropriation watch-outs?
10. Do these stories communicate a variety of cultural experiences relevant to the audience?

These gut questions—and, indeed, the entire Playbook—can be used widely beyond the entertainment industry, in marketing, advertising, PR, communications, and even product development.

Share DEI data, metrics, and goals



Improving DEI accountability and governance requires data. Tech CEOs and companies must overcome their aversion to DEI data transparency and agree to minimum industry standards for DEI data reporting.

Equally critical, the industry must move beyond DEI as an exercise in federal compliance,²⁰⁴ and embrace DEI as a strategy to boost talent and innovation.

Why doesn't that currently happen? In 2014, a handful of tech companies began publishing diversity data. However, the story behind the publication of the first Diversity Annual Reports began in 2011, when CNN filed a Freedom of Information Act (FOIA) request to obtain demographic data on race and gender (the EEO-1²⁰⁵ reports) from the top 20 tech companies. After years of back and forth, a compromise was reached and the companies began publishing their data. The result: the Diversity Annual Report, born from a need to comply with a FOIA request. This is one reason DEI work in tech was conceived defensively.

The decade between 2011–2021 (and in particular the last year) transformed our view of race, equity, and identity. It's now time to enter a new era where DEI in tech moves from compliance to innovation, supported by data and learning.

ACTION 6



Support industry-wide DEI reporting standards and share anonymized data.

ACTION 7



Set public goals.

CONTEXT (ROOT CAUSES AND THE WHY)

Tech CEOs understand better than anyone that learning and innovation come through iteration and experimentation, and that data is indispensable to this process. Yet DEI is an area where companies have limited access to data, and where legal risk—real or perceived—often prevents experimenting or bold goal setting. Sometimes tech companies don't yet have the infrastructure to collect the data (e.g., around talent pipelines and recruitment), or they have the data but choose not to disclose it.

For example, all tech leaders say they want more women in tech. But we can't track and incentivize greater numbers of women or other underrepresented groups in tech if, for example, some companies won't even disaggregate tech and non-tech workforce data. For the industry to move forward, we need *all* tech CEOs to disaggregate their tech and non-tech workforces, so we can gather coherent cross-industry benchmarks and track growth of the industry's talent pool (i.e., market available talent pool).

Until now, the tech industry has been attempting to solve the right problem with the wrong data—and attempting to do it one company at a time.²⁰⁶ No single company can solve tech's DEI challenge,²⁰⁷ which means we must lean into industry-wide accountability *and* greater shared experimentation to drive innovation. We call for a new era of DEI data sharing and transparency focused on learning and experimentation rather than compliance or blame.

HIGH LEVERAGE POINTS FOR SHARING DEI DATA, METRICS, AND GOALS TO EXPERIMENT, LEARN, AND ASSESS PROGRESS

DATA TRANSPARENCY In the tech industry, data has always been important to driving success. Products are measured by the number of users. Sales are measured by the number of clicks. Businesses are measured by the number of dollars per share. Imagine if the same were true of our DEI data.²⁰⁸ Data turns on the lights. Without it, we don't know where we are, how far we have to go, or where to focus our DEI efforts. Data helps us track progress and measure success. We must create a common language around DEI data and agree to hold ourselves and each other accountable to drive transformational change ([SEE ACTION 3.1](#) for how to create DEI data infrastructure).

DEFINITIONS Industry alignment will be nearly impossible if we're all speaking different languages. Unlike general population demographics,²⁰⁹ educational attainment,²¹⁰ and talent-pool data,²¹¹ tech's DEI data has inconsistent definitions, making it nearly impossible to measure and track year-over-year progress.²¹² Agreeing on a shared language around how we categorize employees removes guesswork and allows for true cross-industry comparisons.

GOAL SETTING Goals are effective because they generate the will for behavioral change through factors like personal pride and recognition, accountability, and social norms. They activate the ways to change by focusing effort, because they focus attention, spur persistence, and mobilize specific, relevant strategies to meet the target. In the past, tech company disclosures haven't regularly included goals or targets, and the outcomes to date suggest that disclosure without goals does not motivate change. As an exceptionally data and metrics-driven industry, tech is better set up than most to bring evidence-based rigor to DEI.²¹³

ACTION 6

Support industry-wide DEI reporting standards and share anonymized data.

When it comes to DEI metrics, tech companies must apply the same rigor of other business and product priorities. They must agree on a minimum viable product (MVP) for DEI data reporting. Holistic data should allow companies to track the experience of different demographic groups at different stages in the employee life cycle. While demographic diversity data helps us understand who is in the room, inclusion data helps companies understand different experiences of different groups in the same workforce—and whether the company culture makes all employees feel welcome, respected, and empowered to grow.²¹⁴

In addition, cross-industry efforts to standardize data collection and reporting are foundational. Earlier this year, BlackRock called for standardization across investment management companies around sustainable investing,²¹⁵ as did the Big Four accounting firms.²¹⁶ Tech trade associations like the Internet Association,²¹⁷ and industry groups like AnitaB.org are in the early stages of sharing cross-industry DEI data. The tech industry itself should initiate and align on industry-wide DEI data reporting, standardizing, and sharing standards. This will ensure the right data solves the right problems.

HIGH LEVERAGE POINTS

DATA TRANSPARENCY

DEFINITIONS

GOAL SETTING

TEAM

CHANGE AGENTS



TECH EQUITY ACCOUNTABILITY MECHANISM

The ACT report suggests the creation of Tech Equity Accountability Mechanism (TEAM) to support tech companies with the implementation of ACT Report recommendations. TEAM will be responsible for establishing and maintaining DEI data collection. [See TEAM](#) for more information.

IN SUMMARY

- 6.1. At a minimum, commit to collecting, tracking, and publishing intersectional data on representation, hiring, and attrition.
- 6.2. Disaggregate baseline metrics by function and level, and align on definitions to ensure apples-to-apples comparison.
- 6.3. Expand demographics beyond Equal Employment Opportunity Commission (EEOC) categories (including intersectional data) through self-ID surveys.
- 6.4. Leverage surveys to measure inclusion and employee sentiment.
- 6.5. Share anonymized DEI data with an industry body that will support standardization of DEI data collection.

THE REPRESENTATION EQUATION

Hiring + Promotion – Attrition = Representation

Increasing representation requires a holistic approach: focusing on hiring is critical, but progress in hiring will be wiped out if attrition increases. It can't be either/or.

THE POWER OF INDUSTRY DATA AND COMPARISONS

These tools have had some success in collating publicly available tech company data:

- Information is Beautiful²¹⁸ shows comparable employee data for 23 tech firms from 2014 to 2017. The data can be sorted by gender and race/ethnicity.
- The Plug²¹⁹ was responsible for aggregating and open sourcing statements made by tech companies in this spreadsheet²²⁰ following the murder of George Floyd.
- Measure Up is a partnership between Fortune and Refinitiv to encourage companies to report their data by giving them access to insights once that data has been collected and analyzed, as well as ideas on how to improve.²²¹

CASE STUDY: GLOBAL SELF-ID AT UBER

In an annual, confidential survey, Uber asks its employees around the world to voluntarily share, with granularity, how they identify. In addition to race, ethnicity, gender, and sexual orientation, Uber has added categories like gender identity, caregiver status, disability status, and military status. A critical part of building the Global Self-ID (GSID) program was collaborating with Employee Resource Groups (ERGs), as well as local HR and legal teams across the globe, to identify and expand the most relevant and meaningful categories. For instance, the first survey iteration included race/ethnicity only in the U.S. However, in the updated versions, Uber expanded and adapted the race/ethnicity question to all countries where Uber has employees (subject to local laws and restrictions), including locally relevant categories for each country or region.

The company aims for at least an 80% response rate across all categories, and has seen continued growth in participation, particularly in the categories of gender, race, and ethnicity globally. This year, as part of its [anti-racism commitments](#),²²² Uber formed the Transparency Commitment Project Team, which leverages ERGs and other internal groups to improve response rates, better positioning Uber to collect and share reliable data.

The goals of GSID are to more precisely understand and respond to the needs of Uber's employees, and to continue to hire and retain a diverse workforce. For example, by integrating GSID with engagement surveys, Uber can appreciate the nuances of the employee experience and target actions to meet their needs—whether that's enhancing flexible work policies for caregivers, providing mental health benefits, or creating tailored development programs. Going forward, the company will continue to iterate and refine GSID categories to better reflect the reality of its global workforce.

How to do it

6.1. AT A MINIMUM, COMMIT TO COLLECTING, TRACKING, AND PUBLISHING INTERSECTIONAL DATA ON REPRESENTATION, HIRING, AND ATTRITION.

Companies with over 500 employees should report data on representation, hiring, and attrition, cut it intersectionally by gender, race, and leadership (Director+), and disaggregate it between tech and non-tech.

Best practice would include collecting, tracking, and reporting on the following data:

- A. Progression data**, including information related to performance evaluations, promotions, succession planning, attrition, and compensation decisions.²²³
- B. Trajectory/velocity data**, including how long it takes an individual to be promoted or move into leadership roles.²²⁴
- C. Salary**, including raises and bonuses.²²⁵ [\(SEE ACTION 3.4\)](#)
- D. Equity compensation.**
- E. Candidate pools and hiring funnels.**²²⁶
- F. Data cut by employee status** (disaggregate full-time employees, part-time employees, and contingent workers) and tenure for more granular insight.
- G. Moving beyond race and gender** to report on disability, LGBTQ+, veterans, and age.

Report your data either within your company's Diversity Annual Report or separately. **TEAM**, when established, will act as an accountability mechanism to standardize data reporting across the industry. Depending on the size of your company and your current demographics, some underrepresented groups may be too small to report while maintaining anonymity, or may not be represented at all in your company's population (e.g., Indigenous peoples, nonbinary, and other gender identities). Where this is the case, include a note explaining which groups are not represented in your data reports—it's vital that these groups not be rendered further invisible by virtue of their small numbers. Naming these groups is a way to ensure that DEI efforts include them in the present. Moreover, revealing their low numbers can incentivize future recruiting efforts. We can't improve what we don't measure.

INTERSECTIONALITY

Kimberlé Crenshaw coined the term “intersectionality” to describe the way people’s social identities overlap to create multiple levels of privilege, power, inequality, or discrimination.²²⁷ If you’re standing in the path of multiple forms of exclusion (like race, gender, disability, LGBTQ+, age), you’re likely to have an experience that is uniquely impacted by the intersection of those identities.²²⁸

In the workplace, intersectional data is key to understanding the layers of exclusion and inequity that may exist for certain groups. As NCWIT explains,

“Achieving equity in the tech industry must be intersectional: race, class, gender, sexuality, and other key factors of identity shape experiences differently; understanding those differences is critical to promoting diversity, inclusion, and change.”²²⁹

INTERSECTIONALITY: the way people’s social identities overlap to create multiple levels of privilege, power, inequality, or discrimination.

INTERSECTIONALITY AND THE GENDER PAY GAP

The overall gender pay gap is useful for understanding the impact of gender on women’s pay, as women working full-time are typically paid less than men in the same race/ethnicity group. However, women of different backgrounds have very different experiences and earnings. For example, race and gender each account for some proportion of Black women’s lower earnings. But unlike Black men and White women, they face an additional penalty for the intersection of their identities—for being Black women. An intersectional approach shows us that there are multiple pay gaps, as seen in this 2017 analysis from the U.S. Census Bureau:²³⁰

MEDIAN ANNUAL EARNINGS, BY RACE/ETHNICITY AND GENDER, 2017

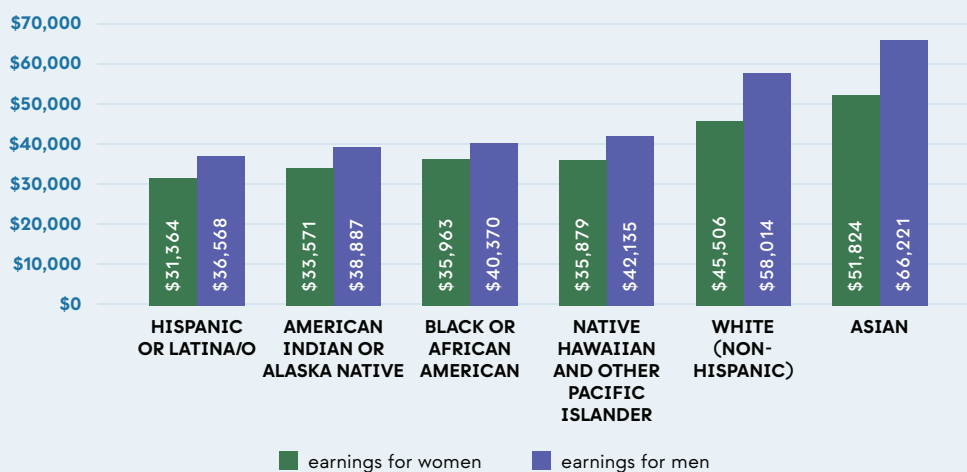


IMAGE SOURCE: U.S. Census Bureau (2018).

6.2. DISAGGREGATE BASELINE METRICS BY FUNCTION AND LEVEL, AND ALIGN ON DEFINITIONS TO ENSURE APPLES-TO-APPLES COMPARISON.

Reporting on the right metrics, disaggregated in a meaningful way, is critical to diagnosing the true health of a system or, in this case, a company's diversity. Two key areas are job function (e.g., a tech company might report a high number of Black and Brown workers overall, but the majority are retail employees) and level (e.g., the representation of women at a company may seem high, but women are primarily in junior and/or non-technical or administrative roles).²³¹

Project Include refers to this type of data as “vanity metrics”—they provide good optics but obscure the real problems, which can lead to distrust among team members who may experience a lack of diversity but don't see the company actually addressing the real gaps and challenges.²³²

DEFINING TECH ROLES

JOB FUNCTION/ROLE: Define roles at the individual team-member level based on the specific characteristic of their job and/or job title, rather than at the organization level. “Tech workers” can then include team members across all organizations who manage technical products or processes and/or work on the development of products and tools, like software engineers, product designers, and data scientists, among other job roles. This excludes team members performing non-technical roles in a primarily technical organization. For example, an executive assistant in an engineering department.

- Tech
- Non-tech
- Retail
- Manufacturing

DEFINING LEADERSHIP

JOB LEVEL: Tech companies often share leadership representation data, which is an important indicator of who holds the decision-making power. Historically, however, tech companies have not had a consistent definition of what leadership means. We propose that tech companies align on leadership as director and above. However it is also useful for companies to track the following metrics for leadership either publicly and/or internally:

- Leadership (Director and above)
- Manager
- Mid-level
- Entry-level
- Intern
- People Manager
- Director+
- VP+
- Direct reports to C-suite
- C-suite or direct reports to CEO
- Board

6.3. EXPAND DEMOGRAPHICS BEYOND EQUAL EMPLOYMENT OPPORTUNITY COMMISSION (EEOC)²³³ CATEGORIES (INCLUDING INTERSECTIONAL DATA) THROUGH SELF-ID SURVEYS.

In some jurisdictions, including the U.S., identity categories used for government data collection like the Census or EEO-1 reporting have not kept pace with the language many people use when they self-identify. Collect and report on the following self-ID categories:²³⁴

A. Race

- Race/ethnicity, using expanded EEOC categories.
- Include an option to break out the “multiple races” category.
- Include a question on national identity(ies).

B. Gender (inclusive of cisgender, transgender, nonbinary, gender non-conforming, gender fluid, queer).

C. LGBTQ+ (include breakout of unique sexual orientations and gender identities including straight, gay, lesbian, bisexual, pansexual, queer).

D. Disability (disaggregated by type).

E. Veteran status.

F. First-generation college student, community college attendance, household income or Pell Grant recipient (as a proxy for socioeconomic status).

G. Parents/caregivers/family responsibilities.

We recommend companies collect self-ID data on the above categories, at a minimum, as best practice. However, companies can also expand their self-ID data collection beyond these baseline categories to include categories such as immigration status, religion, caste, language spoken at home, and age.

Non-intersectional data sometimes hides real challenges. For example, the Ascend Foundation, an organization supporting Asian leaders in a number of industries, found that White women are more likely to be in leadership positions at tech companies than Asian women, which is the group least represented in leadership in tech companies, when compared with their representation in the workforce.²³⁵ But looking at data on women as a group would not reveal this gap.

Looking at race/ethnicity data and how it intersects with gender data—what are called intersectional data cuts—can help identify equity gaps. For example, rather than just looking at women as a whole, you can look at women of color compared to White women, or the experiences of women compared to men in any specific community. We recommend using intersectional data cuts when analyzing and reporting your workforce data, where possible.

INCLUSIVE RACE/ETHNICITY CATEGORIES IN SELF-ID SURVEYS

Project Include recommends using the following breakdowns for race/ethnicity in self-ID surveys:²³⁶

- African American/Black
- East Asian (including Chinese, Japanese, Korean, Mongolian, Tibetan, and Taiwanese)
- Hispanic/Latinx
- Middle Eastern
- Native American/Alaska Native/First Nations
- Pacific Islander
- South Asian (including Bangladeshi, Bhutanese, Indian, Nepali, Pakistani, and Sri Lankan)
- Southeast Asian (including Burmese, Cambodian, Filipino, Hmong, Indonesian, Laotian, Malaysian, Mien, Singaporean, Thai, and Vietnamese)
- White
- Prefer not to answer

It's best practice to allow people to select multiple categories to account for multiracial identities. See the complete list of recommended categories from [Project Include](#).²³⁷

6.4. LEVERAGE SURVEYS TO MEASURE INCLUSION AND EMPLOYEE SENTIMENT.

Most employee engagement surveys have a set of questions that measure inclusion through sentiments like belonging and voice, and ensure these surveys are linked to employee demographics. Leveraging engagement surveys for inclusion data reinforces the fact that inclusion is a fundamental metric for companies to take into account when assessing engagement and predicting retention.²³⁸ Some employee engagement surveys are limited in their approach to measuring inclusion. If you want to gather more in-depth qualitative data, conduct a separate inclusion survey and/or regular pulse surveys to get feedback and insights into how different groups are experiencing your company.

THE IMPORTANCE OF MEASURING INCLUSION

Measuring employee sentiment and inclusion is imperative to building and maintaining an inclusive culture, as it may tell a story that's different from the one told by the numbers. For example, Asian men are often considered “overrepresented” in tech roles, but inclusion data might show that this group feels less of a sense of belonging than their White peers. If employees do not feel included (in whole or in part), retention will suffer and/or performance may be impacted—which can undermine general productivity and hiring efforts (a non-inclusive culture will likely affect your chances to attract new employees), and likely cost your company more in the long run.²³⁹

6.5. SHARE ANONYMIZED DEI DATA WITH AN INDUSTRY BODY THAT WILL SUPPORT STANDARDIZATION OF DEI DATA COLLECTION.

Data should include all current and historic DEI data (including EEO-1 reports) and n-counts in addition to percentages (or n-count of employee population at time of reporting).

In order to make the data accessible and usable, it should be collected and managed by an industry body. **This report proposes the establishment of a new industry organization to support standardizing DEI data collection across the industry** (see [TEAM](#)). TEAM will help standardize collection and reporting, creating an easily accessible industry-wide data set, and ensuring data can be more easily compared across companies to provide a holistic picture of industry gaps.

Data turns on the lights. An industry-wide data set would help us answer questions like:

- Is the tech industry growing diverse talent pools or simply playing diversity musical chairs?
- Is the hypergrowth of the tech industry creating an imbalance in the supply and demand curve of STEM talent?
- Is talent pool the right benchmark for parity?
- What about educational attainment or general population?²⁴⁰

TOOL KIT [↗](#)

[Culture Amp x Paradigm Inclusion Survey](#)

[Disability:IN's Self-Identification Best Practices](#)

[Project Include—Measuring Progress](#)

[Survey Monkey Recommendations](#)

LEVERAGING INCLUSION SURVEYS TO UNDERSTAND THE LAYERS OF COMPANY CULTURE

In July 2018, SurveyMonkey partnered with Paradigm, a consulting firm that specializes in diversity and inclusion, to create an inclusion survey template, which they used to survey working Americans. The results highlighted how different groups tend to experience work, and revealed key pain points around inclusion for all groups.

Specifically:

44% didn't feel they could express a contrary opinion at work without fearing negative consequences.

32% didn't feel their opinion was valued.

60% say their compensation is fair relative to others at their company.

BUT ONLY

48% of Black workers agree with this statement.* ²⁴¹

*In all cases, the percentages in agreement with the statement were lower for people from the under-represented communities surveyed (women, Black, and Hispanic/Latinx).

CONTEXT (ROOT CAUSES AND THE WHY)

Most companies based in the U.S. use categories required by the EEOC when reporting on race and/or gender because they likely have an annual obligation to report to the EEOC using those categories. However, these categories are limited. Giving employees the opportunity to self-identify in a self-ID survey allows companies to ask detailed questions about team members' demographics that go beyond race and gender, expand the categories around race and/or gender to be more inclusive, and approach data collection and reporting with a global lens. More inclusive data categories help give some groups visibility where they've previously been ignored by data.

ACTION 7

Set public goals.

Goals set publicly are particularly effective at driving behavioral change. Goals need to be visible to be viable, and a public, external commitment makes it more likely that they will be achieved. Public goals send a signal internally and externally that the company is serious about improving DEI outcomes.²⁴²

HIGH LEVERAGE POINTS

DATA TRANSPARENCY

DEFINITIONS

GOAL SETTING

CHANGE AGENTS



IN SUMMARY

In their white paper, “Goals and Targets for Diversity, Equity, and Inclusion: A High Leverage Point to Advance Gender Equality in the U.S. Tech Industry,”²⁴³ Bohnet and Chilazi of Harvard Kennedy School set out a step-by-step guide to setting DEI goals, summarized as:

- 7.1. Analyze your company’s DEI data to identify discrepancies and gaps.
- 7.2. Select meaningful benchmarks to determine whether goals are realistic on any given metric.
- 7.3. Ensure goals are challenging to motivate meaningful progress.
- 7.4. Ensure goals are SMART.
- 7.5. Incentivize goal attainment.

SUGGESTED COMPANY-WIDE REPRESENTATION GOALS FROM PROJECT INCLUDE

In 2019, equity advocate and Project Include Co-Founder and CEO, Ellen Pao, suggested that Silicon Valley start-ups and tech companies set four DEI targets (10-10-5-45) in two years:

- 10% representation for Black/African American/African employees.
- 10% for Hispanic/Latinx employees.
- 5% for nonbinary employees. (Less as a target and more as a recognition that some percentage of an inclusive workforce will identify this way)
- 45% for women.²⁴⁴

These targets are based on the diversity metrics of the top quartile of a (non-representative) sample of start-ups that Pao's Project Include and VC Include have worked with, and are an example of the types of representation goals your company could set.

GENDER PARITY AT UNILEVER

Unilever announced in March 2020 that it had met its global goal of reaching gender parity, or a 50-50 split, in its managerial roles. Unilever set the goal in 2010, when the representation of women was 38%.

In addition to company-wide public goals, Unilever sets more granular internal goals for every market and function, which are reviewed and tracked by the Unilever Leadership Executive every month and reported to the Global Diversity Board three times a year. Presenting such actionable information to leaders helped to improve awareness of DEI and spark more thoughtful decision-making around hiring, promotion, and retention.²⁴⁵

Unilever increased women in managerial roles from 38% in 2010 to 50% in 2020 after setting company-wide goals.

How to do it

7.1 ANALYZE YOUR COMPANY'S DEI DATA TO IDENTIFY DISCREPANCIES AND GAPS.

Analyze the representation equation to determine where to prioritize your efforts and what goals make sense. For example, data will inform whether you set company-wide representation goals (percentage of Black employees), specific groups in a certain job function (women in technical roles), or groups at a certain level (Asian women in leadership positions).

7.2. SELECT MEANINGFUL BENCHMARKS TO DETERMINE WHETHER GOALS ARE REALISTIC ON ANY GIVEN METRIC.

A. External benchmarks may include:

- Current or future market available talent pool to take into account changing demographics in the workforce as the U.S. population becomes more diverse.²⁴⁶
- General population (national, regional, local).
- Customer or user base (existing or aspirational).
- Industry standards by benchmarking against peer tech companies.

B. Internal benchmarks may include:

- Affirmative Action Plans.
- Comparing your own company performance year over year (e.g., increase representation of women by 2% each year).

7.3. ENSURE GOALS ARE CHALLENGING TO MOTIVATE MEANINGFUL PROGRESS.

Goals should be ambitious but attainable. Otherwise progress against goals will not change the status quo. In addition, research shows that challenging goals spur more behavioral change than easy ones. Companies may build on publicly shared goals each year (e.g., percentage of women in the company overall in year one, percentage of women in tech roles in year two, percentage of women of color in tech roles in year three, etc.).

7.4. ENSURE GOALS ARE SMART.

Setting goals that are **Specific, Measurable, Attainable/Achievable, Realistic, and Time-bound (SMART)** provides a useful guide to ensure the greatest chance of success.²⁴⁷

7.5. INCENTIVIZE GOAL ATTAINMENT.

- A. Include assessment of progress** toward goals in the performance review process.
- B. Link progress toward goals** with compensation, specifically of senior leaders and the C-suite.
- C. Provide nonfinancial rewards** like awards; celebrate best practice of teams, managers, and individuals; and reward small wins and progress toward larger goals.
- D. Consult managers and others on goal-creation** and DEI objectives to achieve buy-in. Managers' actions will likely determine whether a DEI goal is reached. Research suggests that engaging managers directly on diversity-related programs increases ownership of DEI goals.²⁴⁸

TOOL KIT [↗](#)

EMPLOYEE ENGAGEMENT SURVEYS WITH STRONG INCLUSION INDICES

[Culture Amp](#)

[Humu](#)

[Peakon](#)

INCLUSION SURVEYS

[Culture Amp x Paradigm Inclusion Survey](#)

[Pluto](#)

[SurveyMonkey x Paradigm Inclusion Survey](#)

GENDER PROPORTIONALITY ASPIRATION (GPA)

The Gender Proportionality Aspiration (GPA) is an ambitious policy that allows tech companies to introduce an outcome goal of reaching gender proportionality at all levels in five years. While this goal is not a number, it is a very specific target to increase gender balance in tech.

The GPA²⁴⁹ stipulates the ratio of women to men at any level in a company should be at least proportionate to the ratio of women to men in the level *below*.

The GPA directs companies to use all means at their disposal—promotion, external hiring, internal (lateral) hiring, and retention—to reach this goal for all levels. We expect that an industry-wide commitment to the GPA will substantially help diversify the tech sector.²⁵⁰

WHY GPA?

- **Intentionally gender-neutral.** It reinforces the message that DEI is for everyone. Regardless of which gender is the majority, it encourages leaders to move toward gender balance.
- **Minimizes legal risk.** Goals are not focused on women.
- **Holistic approach to attracting, promoting, and retaining talent.** Instead of just focusing on hiring and the pipeline problem, it incentivizes development of in-house talent.
- **Simple concept.** People are more likely to change their behavior when it is made easy, attractive, social, and timely (EAST). GPA is simple to grasp and easy to implement and track because it relies on a simple count of the fraction of women and men at each level.
- **Setting a company-wide, collective goal is an important step forward.** Social norms are a powerful driver of behavioral change.
- **It meets leaders and teams where they are, and bases goals on current status.** Indeed, some might argue that the GPA is too gradual in its approach, but the model ([SEE APPENDIX](#)) highlights the huge strides that can be made using this approach over a five-year period.

The five-year GPA should be viewed as a first step. As progress is made and women's representation numbers increase, the initial goal should be updated and/or expanded. Future DEI efforts must build on this initial goal while continuing to raise the bar so that all teams always have something challenging, specific, yet realistic to work toward. The scientific evidence is clear that feedback, monitoring, and public accountability are key ingredients of goal attainment.

Transform pathways into tech for underrepresented talent



American students have unequal access to computer science (CS) education in secondary schools. This is compounded by deep educational inequities that start much earlier: sixth graders (11 to 12-year-olds) in the richest school districts are *four grade levels* ahead of children in the poorest districts.²⁵¹

Economic disadvantage is directly correlated with lower performance in math. The need for early intervention is demonstrated by data showing that most of the math deficit among low-income eighth graders already exists by third grade.²⁵²

Even for those students in public school who perform well, the availability of high-quality CS education is patchy and courses are rarely required. Students and their families are poorly informed about the benefits of choosing CS pathways and often rely on school counselors' uneven knowledge and sometimes outdated beliefs about who is "suited" to CS. Even if students want to choose CS, there is a critical shortage of teachers.

Tech CEOs and companies can:

- **Promote widespread policy change** in U.S. states and school districts to transform pathways for future talent, including by supporting policy changes to make CS education a core subject in K–12 pathways and a requirement to make CS education available at high school.
- **Support education of CS teachers**, particularly teachers who are people of color or from underrepresented groups.

OVERCOMING PREPARATORY PRIVILEGE

One challenge of widening pathways into tech is that the CS college curriculum is currently designed for those who attended well-resourced high schools that provide rigorous CS preparation.²⁵³ This is sometimes called "preparatory privilege." For students who have not had a private education (or public school education in an affluent community, private tutors, or expensive summer camps), additional coursework is often required to bridge considerable knowledge gaps. That means extending time to complete college degrees, holding down jobs to fund tuition, and reducing participation in networking and skill-building extracurricular activities. This situation is most common among first-generation students—the first in their family to attend college.²⁵⁴

Women, Black, and Hispanic/Latinx students who take CS in college often report subtle and not-so-subtle stereotypes and microaggressions that chip away at their confidence. Dropout rates are higher for women and underrepresented students. Those who do drop out are left without a credential, eliminating their employment chances at companies that require a bachelor's degree.

Tech CEOs and leaders can make clear to colleges and universities that their CS education must work for women and underrepresented groups without preparatory privilege.

Tech companies should:

- **Recruit from universities that demonstrate diverse student populations** within their STEM or tech degree programs.
- **Request DEI data and stats from universities** breaking down gender and race participation, including within STEM or tech degree programs.
- **Develop relationships with tech workforce programs**, including apprenticeships and community colleges that provide quality tech training delivered on-the-job in full-time employment, at no cost to the individual.²⁵⁵
- **Encourage universities to integrate ethics** into the CS curricula related to tech products and services. Curriculum should incentivize students to think about ethics and DEI in the code they design and its impact on users.

ACTION 8 →

Advocate for computer science (CS) to be required in all schools.

ACTION 9 →

Build systems capacity to create more CS teachers at all levels, and invest in CS faculty within colleges of education.

ACTION 10 →

Invest in organizations that connect talent from underrepresented groups to tech careers.

HIGH LEVERAGE POINTS FOR TRANSFORMING THE FUTURE PATHWAY OF TECH TALENT

EDUCATION POLICY Make CS a core course in the K–12 pathway, and require access to CS education for all students in the U.S. Start in the states where you operate. Support policy to address wider educational inequity.

CS TEACHERS Work with colleges of education to create more teachers who are well prepared to teach CS, and expand training and credentialing. Update teacher training so all teachers have foundational knowledge of CS.

TALENT ORGANIZATIONS Connect underrepresented talent to tech careers. Invest in organizations and institutions that are already creating new pathways and connecting underrepresented students to tech.

APPRENTICESHIP PROGRAMS Invest in apprenticeship programs to accelerate early career talent development and develop the skills of underrepresented groups without degrees. Support talent in building the technical and digital skills, leadership skills, and social capital they will need to advance their careers in tech.²⁵⁶

CONTEXT (ROOT CAUSES AND THE WHY)

Computer science (CS) education is not integrated into the priorities, policies, or metrics of the public education system in most U.S. states and school districts. Integrating CS education into the heart of education will:

- Address technical talent shortages facing U.S. businesses.
- Improve global competitiveness and drive innovation in the tech sector.²⁵⁷
- Prepare young people for a digital-first future.

Even when CS education is available, many students opt out of CS. They may lack meaningful exposure to the subject or face a cultural narrative that they don't belong in CS, and subsequently lose interest. However, occupational choice is linked to identity, confidence, and belonging, as well as stereotypes and subtle social cues—not just interest.²⁵⁸ Unsurprisingly, studying science and math in high school correlates with studying those subjects later in college.²⁵⁹

WHAT'S THE PROBLEM?

- **Well-prepared CS teachers are in critically short supply.** We need more teachers educated in CS and qualified to teach it—both integrated in the K-8 pathway and as stand-alone high school courses.
- **Currently, few CS certification programs are available** in colleges of education, and only a handful of institutions have CS education faculty.
- **Gender and racial stereotypes about who belongs in CS** and who doesn't are repeated and reinforced every day by parents, teachers, school counselors, other kids, social media, radio, film, and television. In the absence of curricular requirements to study CS, underrepresented students are most likely to skip CS courses that lead to CS-related careers—or even that prepare students for those CS careers.
- **Teachers who become skilled in CS are likely to leave teaching** for more lucrative careers elsewhere, as teaching salaries are far below private sector salaries.

WHAT'S THE SOLUTION?

- The solution is to include CS as a core subject and require CS education for all students, in the same way they are required to study math or English. We also call on the tech industry collectively, ideally under the auspices of the Tech Equity Accountability Mechanism (TEAM), to call for a comprehensive review of solutions to retain CS teachers in public schools.

ACTION 8

Advocate for computer science (CS) to be required in all schools.

Push to establish CS as a core K–12 subject. Use your collective voice as industry leaders to join with, champion, and financially support the states and school districts that are seeking to improve K–12 provision of CS education. Advocate for increased funding for public education generally, and push states and the federal government to reduce wider educational inequities.

HIGH LEVERAGE POINTS

EDUCATION POLICY

CS TEACHERS

CHANGE AGENTS



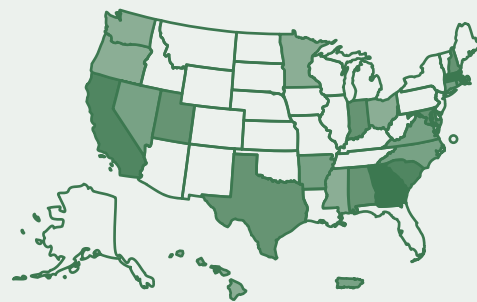
IN SUMMARY

- 8.1.** Partner with the Expanding Computing Education Pathways (ECEP) Alliance²⁶⁰ to initiate and support state and district-based policy reform to improve CS education.
- 8.2.** Encourage increased local, state, and federal investment in educational equity, CS educational policies, and well-prepared teachers.
- 8.3.** Leverage site selection for business expansion to drive investment in K–12 CS funding.

ECEP: EXPANDING COMPUTING EDUCATION PATHWAYS ALLIANCE

ECEP is a 23-state alliance sharing best practices to increase the number and diversity of students in the CS talent pipeline through state-level educational reforms. Only 47% of high schools in the U.S. offer a CS course, and only a small subset requires CS for graduation.

In other words, most high school students in the U.S. never have to learn computer science—an egregious omission in the 21st century. ECEP supports states and districts in establishing policies to make CS courses fundamental to K-12 education.

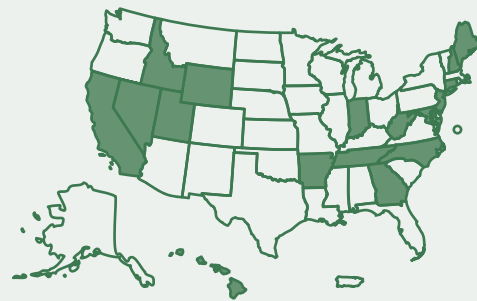


- ECEP Origin States
- Phase 1
- Phase 2
- Phase 3
- Phase 4

To date, ECEP claims several successes, such as:

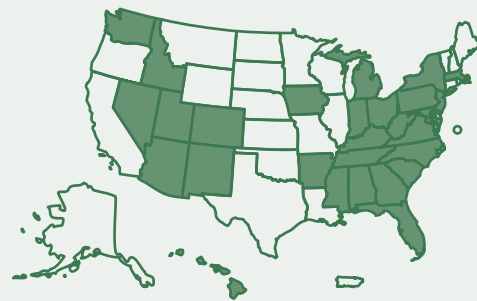
18 states have a plan for K-12 CS education.

- With plan
- With no plan



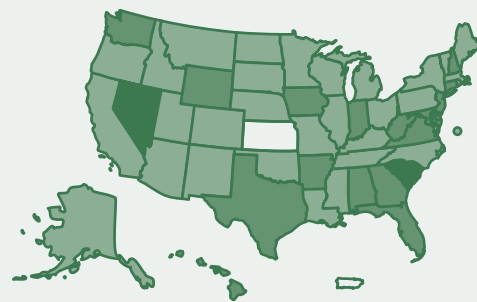
29 states fund professional development for CS teachers, though most recently cut funding because of the COVID-19 pandemic.

- Fund professional development
- Don't fund



20 states established a requirement for all high schools to offer CS, and 48 states allow CS to meet a high school graduation requirement. But only two states, Nevada and South Carolina, require CS for graduation.

- Require CS for graduation
- Require HS to offer CS
- Allow CS to meet a HS grad requirement



Want to know how the states where your company operates are doing? Read the 2020 ECEP report.²⁶¹

How to do it

8.1. PARTNER WITH THE EXPANDING COMPUTING EDUCATION PATHWAYS (ECEP) ALLIANCE TO INITIATE AND SUPPORT STATE AND DISTRICT-BASED POLICY REFORM TO IMPROVE CS EDUCATION.

CEOs can leverage ECEP's extensive experience to encourage policy reform. CEOs should:

- A. Join forces with existing ECEP initiatives in 23 states.** Find out whether a U.S. state or territory in which you are interested is an ECEP state alliance member,²⁶² how many and which CS policies each state has implemented, and the quality of their CS professional-development programs. Talk to state ECEP leaders to find out what support is most needed, such as funding or advocacy.
- B. Facilitate ECEP involvement in states that are not yet members.** Every state and territory has a unique policy environment. Consult with ECEP to find out how they can support your efforts to increase diversity in CS.²⁶³
- C. Advocate for a State Summit for establishing CS education policies.** Leverage ECEP's experience with their State Summit Toolkit.²⁶⁴
- D. Advocate for state data systems to share CS course data disaggregated** by race, gender, ethnicity, socioeconomic status, and disability status of enrolled students. Many states cannot accurately answer questions about where CS is being taught or who is enrolled.

8.2. ENCOURAGE INCREASED LOCAL, STATE, AND FEDERAL INVESTMENT IN EDUCATIONAL EQUITY, CS EDUCATIONAL POLICIES, AND WELL-PREPARED TEACHERS.

- A. Let state legislatures know that CEOs care** about CS educational policy for K–12 students. Advocate for standards-based CS education.²⁶⁵
- B. Encourage increased state, local, and federal investment** in public education and policies that increase educational equity.
- C. Look for a balance between national and local approaches**, e.g., work through national organizations like the Computer Science Teachers Association (CSTA) to support community-generated standards at scale, while creating local partnerships for career and technical education programs.
- D. Partner with locally led CS education initiatives** to advocate for and fund K–12 policy and teacher preparation, and identify local high-priority items that need support. Don't reinvent the wheel. Many states and cities have community-driven CS education organizations, such as CS4ALLCPS in Chicago, CSforPGH in Pittsburgh, or CSforMA in Massachusetts, CSforCA in California, CS4RI in Rhode Island, Code Virginia, and more.

8.3. LEVERAGE SITE SELECTION FOR BUSINESS EXPANSION TO DRIVE INVESTMENT IN K-12 CS FUNDING.

Companies can leverage and extend site strategy by including equity-based selection criteria when deciding where to open new offices. These selection criteria to support greater educational equity include consideration of:

- A.** K–12 CS educational policy environment.
- B.** Availability of CS in schools.
- C.** CS educational capacity within colleges of education.
- D.** School desegregation efforts.
- E.** Equitable school funding.
- F.** Teacher professionalization.
- G.** Universal broadband access.

ACTION 9

Build systems capacity to create more CS teachers at all levels, and invest in CS faculty within colleges of education.

Teachers well-prepared in CS are in critically short supply. Supporting the professional development of CS teachers is essential for meeting educational policy requiring CS for all students.

HIGH LEVERAGE POINTS

EDUCATION POLICY

CS TEACHERS

CHANGE AGENTS



IN SUMMARY

- 9.1. Create CS education capacity in the schools that prepare teachers.
- 9.2. Advocate for and support teacher certification in colleges of education.
- 9.3. Prepare existing teachers to teach CS.
- 9.4. Work at an industry level to retain CS teachers.

How to do it

9.1. CREATE CS EDUCATION CAPACITY IN THE SCHOOLS THAT PREPARE TEACHERS.

Promote and invest in CS education in schools and colleges of education. This can be done by funding faculty and programs that specialize in CS education. Such investments are prestigious, and signal the importance of CS at an institutional level. These investments won't only build capacity at an institution, they'll also create a pipeline of PhD students to fill similar roles at other institutions as demand for CS education faculty grows. Prioritize investing in institutions that prepare significant numbers of teachers of color and teachers that serve in underrepresented communities. Most universities and colleges provide guidance for endowing positions and levels of funding required, usually ranging from \$2 million to \$5 million.

- A. Establish a center of excellence for CS education** through a multiyear grant investment. That would enable an institution to immediately start a program and fund faculty positions and graduate students, while establishing the research, teaching, and projects that would draw additional funding to the center.
- B. Endow a chair or faculty member with specific research, teaching, and service responsibilities in CS** in a preservice program at a college of education. Collaborate with the institution to ensure that the position works toward a goal of establishing or advancing a CS preservice program, and that the position is officially connected with colleagues in the CS department.
- C. Provide a short-term gift to fund term chairs or professorships** to support a faculty member for a specific number of years.

STRATEGIC INVESTMENT IN PRESERVICE TEACHER PREPARATION IN CS

Every teacher at every level should have a foundational understanding of computer science. At Michigan State University, for example, Dr. Aman Yadav transformed the educational technology course for new teachers to include foundational learning in CS and computational thinking. To increase CS education access for students with disabilities, he integrated CS and computational thinking into two required courses for special-education teachers. Yet very few colleges of education have faculty dedicated to the preparation of teachers in CS. Meanwhile, the bulk of K-12 CS education research is taking place in colleges of engineering and computer science, which are often disconnected from colleges of education.

Investing in CS education capacity within schools of education ensures that new teachers graduate prepared in CS, builds the field of CS education research in the colleges that prepare teachers, and incubates a pipeline of PhD candidates to populate other colleges of education. Further, directing these investments to institutions that prepare high percentages of teachers of color will seed the next generation of CS education leaders with teachers of color—a critical need—as well as rapidly graduate large numbers of teachers prepared to teach CS in all classrooms. Contact CSforED@csforall.org to get started.

9.2. ADVOCATE FOR AND SUPPORT TEACHER CERTIFICATION IN COLLEGES OF EDUCATION.

Find out if a state in which you are interested has a program to certify teachers in CS (i.e., preservice teachers).²⁶⁶

- A. If your state does not have a sufficient number of CS preservice teacher programs, connect with the state legislature** and a college of education to let them know that your company will support their efforts to establish new programs.
- B. Provide scholarships and fellowships for aspiring teachers** who will commit to completing the certification and teaching in schools, especially in districts heavily populated by underrepresented racial/ethnic communities.
- C. Fund internships and apprenticeships for preservice teachers**, so they can be paid to work in real classrooms with experienced CS teachers.
- D. Encourage in-depth coverage of ethics in computing**, and help faculty see the value of ethics as part of CS education so this topic can both be taught independently and woven into other courses.

9.3. PREPARE EXISTING TEACHERS TO TEACH CS.

Corporations can partner with states, local educational agencies, and school districts to fund preparation of experienced teachers from other disciplines to teach CS. Teachers should learn CS as well as CS pedagogical content knowledge (PCK).²⁶⁷ Understanding CS PCK is critical, since computational thinking²⁶⁸ is new for most students (and likely for these teachers). Multiple evidence-based curricula and teacher professional programs already exist for in-service teacher preparation in CS.

Corporations can pair CS professionals with teachers in the classroom to engage with students disconnected from tech career opportunities. Fund employees to volunteer with schools for a half to one day a week, leveraging corporate social responsibility (CSR) efforts, Employee Resource Groups (ERGs), and other corporate volunteer program resources. Volunteers learn to teach and teachers learn CS—a win for everyone. See the Microsoft Technology Education and Literacy in Schools (TEALS) program for an example of this in practice.²⁶⁹

9.4 WORK AT AN INDUSTRY LEVEL TO RETAIN CS TEACHERS.

The teaching profession offers far less competitive pay than industry, and 55% of public school teachers say they are not satisfied with their salary.²⁷⁰

The disparity in salaries between teaching jobs and tech jobs is vast, and the pay gap between being a programmer and teaching programming is greater still.²⁷¹ As a consequence, many CS teachers leave the teaching profession for well-paid jobs in business, further exacerbating the critical shortage of CS teachers in public schools.

There is an urgent need to find new innovative approaches to incentivize teachers to stay in CS.²⁷² We therefore call on the tech industry to convene a working group—for example, through the newly proposed TEAM organization outlined in section three—to develop an industry solution for keeping CS teachers in the classroom.

ACTION 10

Invest in organizations that connect talent from underrepresented groups to tech careers.

Many organizations are already working to advance high-quality postsecondary CS education at every level. CEOs do not have to reinvent the wheel, but can fund and partner with experienced providers and consultants.

HIGH LEVERAGE POINTS

TALENT ORGANIZATIONS

APPRENTICESHIP PROGRAMS

CHANGE AGENTS



IN SUMMARY

- 10.1.** Increase support for building technical talent pools for your workforce by promoting systemic reform and funding students from underrepresented groups at institutions of higher education.
- 10.2.** Establish relationships with institutions that graduate Native American, Black, and Hispanic/Latinx students. Promote opportunities for paid internships, “sprinternships,” and apprenticeships with your company.
- 10.3.** Fund intermediary programs and organizations to help build pathways into tech for students from underrepresented groups.

How to do it

10.1. INCREASE SUPPORT FOR BUILDING TECHNICAL TALENT POOLS FOR YOUR WORKFORCE BY PROMOTING SYSTEMIC REFORM AND FUNDING STUDENTS FROM UNDERREPRESENTED GROUPS AT INSTITUTIONS OF HIGHER EDUCATION.

Make your commitment to diversity and inclusion known to the schools where you recruit, and invest in their ability to recruit and retain CS undergraduate and graduate students from underrepresented groups through graduation. Most Black and Hispanic/Latinx students attend majority institutions and can experience micro-inequities that push them out of majors where they don't feel welcome.²⁷³

Signal to colleges and universities that corporations want to attract tech talent from many backgrounds. Support CS departments that seek to institutionalize change with programs like NCWIT Extension Services for Undergraduate and Graduate Programs.²⁷⁴ A small investment supports customized consultation to plan, implement, and evaluate sustainable recruiting and retention efforts for a program that feeds a corporation's tech talent pool.

Fund generous undergraduate scholarships for underrepresented students. Many first-generation college students have to earn income, reducing their ability to take advantage of extracurricular opportunities. Grant models like the Last Mile Education Fund can help level the playing field for these students.²⁷⁵ Offer opportunities specific to undergraduate students who participated in or completed career and technical education (CTE) programs in high school. Provide graduate fellowships to allow master's and PhD programs to attract and retain students from underrepresented groups. Fellowships allow students more freedom to conduct important research that can be relevant to your corporate goals. Offering summer internships can cement a relationship with those future researchers.

CS@MINES BRIDGE

Master's degrees in CS almost always require an undergraduate degree in CS for entry. Yet professionals from underrepresented groups who are interested in switching to a tech career are unlikely to have the prerequisite degree. Bridge programs can provide needed preparation.

The CS@Mines Bridge teaches fundamental skills and computing principles through hands-on projects and real-world applications. The two-semester program takes place through online and in-person classes, and students have the full support of college services. Students can then advance into the Colorado School of Mines CS master's program. With support from Chevron, students are provided scholarships.²⁷⁶

PROMOTING SYSTEMIC CHANGE FOR UNDERGRADUATE AND GRADUATE PROGRAMS IN COMPUTING FIELDS: NCWIT EXTENSION SERVICES

The National Center for Women & Information Technology (NCWIT) Extension Services for Undergraduate and Graduate Programs²⁷⁷ are initiatives for addressing the severe gender imbalance in computer science. The undergraduate intervention model has been successfully deployed in 135 computing departments, while the graduate program is in its pilot phase, partnering with two large computer and information science colleges. Each provides a research-based model of strategic systemic reform and customized consultation, taking into account local policies and conditions. The programs have demonstrated positive outcomes for attracting and retaining women in computing.

Johnson & Johnson funded NCWIT Extension Services for Undergraduate Programs to support a computer science department from which it regularly hires tech talent. In its first four years of change efforts, the department increased the percentage of CS bachelor's degrees awarded to women from 14% to 19%.

Google funded the development of the NCWIT Extension Services for Graduate Programs²⁷⁸ and supported the pilot program with two large PhD programs located in colleges of computing. Pilot institutions are examining what's working to recruit and retain students from underrepresented groups, as well as identifying barriers to admission and retention through graduation. Data and analysis will support strategic plans for institutionalizing change.

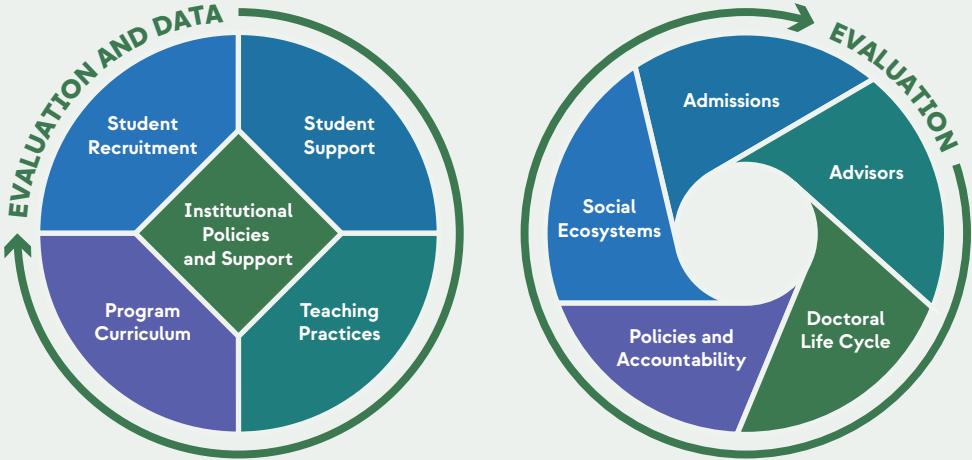


IMAGE SOURCE:
NCWIT Extension Services
for Undergraduate
and Graduate Programs.

10.2. ESTABLISH RELATIONSHIPS WITH INSTITUTIONS THAT GRADUATE NATIVE AMERICAN, BLACK, AND HISPANIC/LATINX STUDENTS. PROMOTE OPPORTUNITIES FOR PAID INTERNSHIPS, “SPRINTERNSHIPS,” AND APPRENTICESHIPS WITH YOUR COMPANY.

- A. Many tech companies have strong relationships with elite colleges and universities, but not with Hispanic-serving institutions, historically black colleges and universities, and tribal colleges. **Building relationships with institutions serving underrepresented groups** provides a pipeline of highly educated, creative talent. Learn best practices for recruiting through building strong relationships.²⁷⁹
- B. **In addition to internships, consider creating a “sprinternship” program** for students with little experience where they can acquire experience and skills in short, intensive programs. Learn from the Break Through Tech Sprinternship Program.²⁸⁰
- C. **Establish or fund a co-op program that employs CS undergraduates from underrepresented groups** during the academic year. Co-op programs give students authentic experiences and greatly improve their ability to be hired upon graduation. Learn how to build a successful co-op program.²⁸¹

10.3. FUND INTERMEDIARY PROGRAMS AND ORGANIZATIONS TO HELP BUILD PATHWAYS INTO TECH FOR STUDENTS FROM UNDERREPRESENTED GROUPS.

- A. **Develop and fund bridge programs** for incoming undergraduates whose high school preparation must be augmented in order to succeed in a CS bachelor’s degree program. Begin recruiting juniors from high schools that serve Black and Latinx students. By paying the students and funding the organizational resources needed, your company will demonstrate a deep and serious commitment to expanding pathways for students who are underrepresented in computing.
- B. **Many organizations are actively preparing the tech talent of the future.** Get involved with groups that are already experienced and knowledgeable about the space, and invest in growing their impact ([SEE TOOL KIT: JOIN, LEARN FROM, AND INVEST IN EXISTING INITIATIVES](#)).
- C. **Sponsor CS service learning** and other projects for undergraduates at your company. Such projects provide students with real-world experience, while allowing employees to see firsthand the talents of students whom they may not encounter in the typical recruiting process.

D. Create and strengthen nontraditional pathways into tech careers. Tech boot camps and bridge programs allow professionals to acquire the knowledge and skills necessary to enter and advance in tech careers. Many college graduates are underemployed or employed in shrinking industries. Corporations can create boot camps for their own employees or make connections with existing organizations to feed their talent pools. For example, JPMorgan recruits through its TechConnect²⁸² program and collaborates with training programs like Zip Code Wilmington.²⁸³ Google offers professional training through its Google Career Certificates²⁸⁴ program.

E. Invest in an apprenticeship program. Apprenticeships expand access to and retention in tech careers to people from underrepresented groups who don't attend traditional four-year colleges, many of whom are Black and Hispanic/Latinx. Leading companies in tech and the Fortune 500 have leveraged apprenticeship programs to train and develop their next generation of tech talent and business leaders. Apprentices develop in-demand skills through applied learning and receive coaching to help them navigate workplace challenges.

CASE STUDY: SPOTIFY'S TECHNOLOGY FELLOWSHIP PROGRAM

[Spotify's Technology Fellowship Program](#)²⁸⁵ is aimed at hiring engineers just entering the professional tech field from nontraditional backgrounds. The idea for the program originated at a company-wide hack week in 2016. Spotify engineers noticed that graduates from coding boot camps and other nontraditional educational backgrounds were not getting through programming interviews to receive job offers. They realized that while boot camp graduates received intense coding tutorials, they had not developed the applied engineering experience one needed to succeed in an interview and be hired.

The Fellowship, which launched in New York City, is designed to give candidates the necessary practical experience. For 18 weeks, program participants—about eight engineers—operate as a team within Spotify while receiving mentoring, and personal and professional development from various employees. To identify candidates, the Fellowship partners with [NYC Tech Talent Pipeline](#)²⁸⁶ to source talent, focusing on people who are self-taught, attended a coding boot camp, or have degrees from community colleges.

The results have been strong. Spotify has hired 93% of program participants for full-time positions, and they have come from a variety of backgrounds and life experiences. Moreover, the program has given the company's engineers the opportunity to serve as mentors and develop their own leadership skills.

One reason the program has been so successful is that participants are supported at every phase, building high levels of trust. The culture is to acknowledge that the work isn't easy and that failure is an opportunity to learn. Workshops explicitly tackle challenges like imposter syndrome and maintaining a growth mindset. The goal is to make people feel emotionally safe and professionally supported so they can develop their skills without fear or intimidation.

After four successful years in New York, the program is expanding to London and Stockholm (Spotify's headquarters). Over time, the Fellowship will continue to build strong feedback loops with NYC's Tech Talent Pipeline and coding boot camps in order to strengthen CS curricula and create more pathways for engineers from diverse backgrounds.

TOOL KIT: JOIN, LEARN FROM, AND INVEST IN EXISTING INITIATIVES

Many organizations help students get involved in tech, and others have initiatives that support colleges and universities in making their CS programs more inclusive for underserved students. Corporations can sponsor events and initiatives, create and communicate internships and other opportunities, and maintain communication with these organizations to show their interest in diversity. Below are just a few of the organizations corporations can work with:

- **81cents.** Provides affordable, accessible, virtual negotiation support and data for women and other underrepresented minorities.
- **AccessComputing.** Increases the participation of people with disabilities in computing fields.

TOOL KIT  (CONTINUED)

- **American Indian Science and Engineering Society (AISES)**. Focuses on substantially increasing the representation of Indigenous peoples in science, technology, engineering, and math (STEM).
- **AnitaB.org**. Connects, inspires, and guides women in computing and in organizations that view technology innovation as a strategic imperative.
- **Association for Computing Machinery (ACM and ACM-W)**. Advances computing as a science and profession, with more than 680 student chapters around the world.
- **Bitwise Industries**. Helps upskill students and people typically left out of the tech industry, which transforms the economies of each city Bitwise serves.
- **Black Girls Code**. Builds pathways for young women of color by introducing them to skills in computer programming and technology.
- **Black Girls Do Engineer Corporation**. Develops Black American girls and young women in all areas of STEM through leadership, mentorship, critical thinking projects, STEM design and experiments, and life skills.
- **BlackcomputHER**. Supports computer and tech education and workforce development for Black women and girls.
- **Break Through Tech**. Removes obstacles that keep women from the tech talent pipeline.
- **BridgeUP STEM**. Provides opportunities for girls, women, and gender non-conforming individuals of all backgrounds to learn the skills of computer science and research methodology within a research university setting.
- **Center for Minorities and People With Disabilities in IT (CMDiT)**. Offers resources, programming and leadership initiatives, and national scale projects to foster innovation through inclusion.
- **Code with Google**. Connects students from underrepresented groups to computer science education and the tools they need to build skills for the future.
- **CodeHouse**. Focuses on cultivating a strong pipeline between students of color and industry-leading technology companies to build the next generation of diverse tech leadership.
- **CodePath**. Transforms college computer science education for underrepresented minorities and underserved populations in order to eliminate educational inequity in technical careers.
- [Code.org](#). Expands access to computer science in schools and increases participation by young women and students from other underrepresented groups.
- **ColorStack**. Offers community building, academic support, and career development for Black and Latinx college CS students.
- **Computer Science Teachers Association**. Community of computer science teachers that prepares teachers to offer high-quality classroom experiences.
- **Computing Alliance of Hispanic-Serving Institutions (CAHSI)**. Addresses the low representation of Hispanics in computing in both higher education and the workforce.
- **Computing Research Association**. Joins with industry, government, and academia to strengthen research and advanced education in computing.
- **CSforALL**. Connects providers, schools and districts, funders, and researchers working toward the goal of providing quality CS education to every child in the United States.
- **Diversity Lab**. Incubator for innovative ideas and solutions that boost diversity and inclusion in law.
- **Girls Who Code**. Building the world's largest pipeline of future female engineers.

TOOL KIT  (CONTINUED)

- **Institute for Women's Policy Research.** National think tank that builds evidence for policies that grow women's power and influence, close inequality gaps, and improve the economic well-being of families.
- **Internet Association.** Trade association that exclusively represents leading global internet companies on matters of public policy.
- **Kapor Center.** Family of organizations that pursue innovative strategies to leverage capital, talent, and technology for positive social impact.
- **Last Mile Education Fund.** Increases diversity in tech and engineering fields by addressing critical gaps in financial support for low-income, underrepresented students within four semesters of graduation.
- **LA-Tech.org.** Aims to bring the tech community together around common civic goals and to bring economic opportunities to LA's underserved communities through four pillars: educate, mobilize, connect, and amplify.
- **Management Leadership for Tomorrow.** Supports a pipeline of Black, Latinx, and Native American undergraduate, graduate, and management-level talent through its playbook, coaching, and networking programming.
- **Multiverse.** Customizes apprenticeship programs to train entry-level talent and upskill existing employees according to company needs.
- **Natives Rising.** Bridges the gap between tech and Indigenous communities by providing community, networking, and career coaching.
- **NCWIT Aspirations in Computing.** A program that supports girls and women in getting into the field of computing—and staying there.
- **NSBE.** Supports and promotes the aspirations of collegiate and precollegiate Black engineer students and technical professionals in engineering and technology.
- **oStem.** Professional association for LGBTQ+ people in the STEM community offering scholarship, leadership, and mentorship programming, as well as an annual conference.
- **PledgeLA.** A collective of 215+ LA-based tech companies and VC firms working to increase equity and accountability in the local ecosystem, a partnership by the Annenberg Foundation and the City of LA.
- **Reboot Representation.** Coalition of tech companies committed to doubling the number of Black, Latina, and Native American women graduating with computing degrees by 2025.
- **SHPE/MAES.** Fosters Hispanic leadership in the STEM field through mentorship, webinars, resource groups, networking opportunities, and more.
- **Society of Women Engineers.** Empowers women to succeed and advance in engineering and be recognized for their life-changing contributions as engineers and leaders.
- **STARS Computing Corps.** Broadens participation of underrepresented groups in computing within institutions of higher education.
- **TECHNOLOchicas.** National initiative of NCWIT and Televisa Foundation designed to raise awareness among young Latinas and their families about opportunities and careers in technology.
- **WiCyS.** Brings talented women together to celebrate and foster their passion and drive for cybersecurity.
- **WorkingNation.** Seeks to galvanize the public will and mobilize critical resources to mitigate the growing employability gap in America.

Find many other initiatives among the [CSforAll](#) membership.

Venture Capitalists and Start-Ups

Venture Capitalists (VCs)

Data shows that the venture ecosystem remains predominantly White and male,²⁸⁷ and that in some respects the situation is getting worse.²⁸⁸ In an industry where fair access is a huge challenge, venture capitalists (VCs) hold disproportionate power as pivotal gatekeepers to the tech-driven modern economy. VCs decide which ideas, companies, and individuals get a chance to become businesses, potentially shaping the economy. Yet the majority of the population is largely excluded from opportunities VCs create due to factors like race and gender.

The barriers are industry-wide, organizational, and interpersonal, and they combine to create a culture that can be hostile to women and underrepresented racial groups. At the same time, VCs hold sway not only over their own firms, but also over their portfolio companies. This means they have the potential to be a high leverage point in helping to change organizational practices, culture, and commitment. The VC industry needs to address gender and race inequities the same way as the tech industry at large—by focusing on evidence-based interventions at business and industry levels. Harvard Kennedy School researchers put forward a set of concrete steps that VCs can take to reduce bias in their practices and advance DEI.

1. Institute more structure in the hiring process for VC firms and portfolio companies.

- Create formal and thoughtful job descriptions that focus on required skills and competencies, and use inclusive language.
- Predetermine evaluation criteria to avoid hiring applicants who are similar to you, regardless of qualifications.
- Require diverse slates and balanced short lists in hiring.
- Implement structured interviews that focus on skills and qualifications to enable direct comparisons between candidates.
- Introduce work sample tests, which are more predictive and less prone to unconscious biases than unstructured interviews or resume reviews.
- Consider a centralized process for bundled hiring.

2. Within the VC firm, equalize access to feedback, mentorship, and resources for success.

- Distribute resources (e.g., data, support staff, budget, feedback) and opportunities (e.g., presentations, speaking slots at conferences, board observer positions) to succeed equally.
- Make sure everyone has mentors both inside and outside the firm.

TOOL KIT [↗](#)

[Advancing Gender Equality in Venture Capital: Executive Summary](#)

[The Diversity VC Standard](#)

[Harvard Kennedy School's research on Venture Capital and Entrepreneurship](#)

3. Standardize and de-bias the funding and pitching process.

- Implement structured pitch sessions.
- Assess pitches independently first, then discuss as a team.
- Evaluate pitches and ventures jointly and simultaneously, as opposed to sequentially.
- Consider blind evaluations of pitch decks.
- Expect investors to explain reasoning when founders from underrepresented groups are not funded.
- Provide constructive, specific, actionable feedback to founders.

4. Track diversity and inclusion-related data to expose inequities and set targets to remedy them.

- Track diversity and inclusion data for the VC firm and all its portfolio companies—what gets measured gets done.
- Set diversity and inclusion targets for the VC firm and all its portfolio companies.
- Assign specific accountability for meeting diversity and inclusion goals.
- Consider sharing some data, goals, and/or progress publicly.

Start-Ups

The recommendations in this report apply to start-ups as much as to any other company. However, unlike established companies that may have to adjust existing practices and culture in order to truly make the paradigm and mindset shift necessary to change DEI outcomes, start-ups have the opportunity to intentionally implement these recommendations to bake in a deliberate, strategic approach to DEI from the very beginning.

Perrine Farque, a DEI expert, recommends start-ups take the following steps:²⁸⁹

- 1. Understand why diversity is important to you, and articulate how it ties to your mission.** Ask yourself why diversity, equity, and inclusion is important to your start-up. Take time to craft your answer, clearly articulate why it's important, and incorporate that value directly into your mission.
- 2. Start building an inclusive culture from day one.** The earlier you become intentional about diversity and inclusion, the easier it is to create and sustain an inclusive culture. You can think critically about the culture you're creating without spending money or allocating resources. For example, noticing women taking on extra responsibilities when the company was still as small as 10 team members, Lever, an HR tech company that focused on building an inclusive culture from the beginning, started focusing on equity in the everyday. Lever suggests asking the following questions:
 - Are you creating a culture that will retain great talent, regardless of identity?
 - What behavior do you reward, and how are promotions made?
 - Who is picking up the slack for administrative work?²⁹⁰

Former Lever CEO, Sarah Nahm:

“Our first D&I task force formed when we were just 10 employees. Fast-forward to today, and at approximately 120 employees, our team’s gender balance is 50:50, 53% of our managers and 40% of our board members are female, and 40% of our workforce is non-White.”

- 3. Set diversity goals tied to monetary compensation from the beginning.** Only a quarter of start-ups (26%) are actively trying to increase diversity within their leadership teams, according to Silicon Valley Bank.²⁹¹ Less than half (43%) of start-ups have company-wide promotion and hiring goals for diversity, while fewer than one in five had these goals for executive positions (the C-suite). Roughly 78% of start-up founders have no formal plans or policies in place to promote diversity and inclusion.²⁹² Monetary goals drive behavior faster. And when they become part of a company's performance structure early on, they become an implicit and accepted part of the culture.
- 4. Appoint a diversity task force** with buy-in from executive leadership and employees. It should have a mission to monitor progress, evaluate results, and innovate around diversity and inclusion. To be successful, your task force must be sponsored by an executive.

TOOL KIT [↗](#)

[Culture Amp x Paradigm Inclusion Survey](#)

[Justworks DEI Resource Center for small and medium-sized business](#)

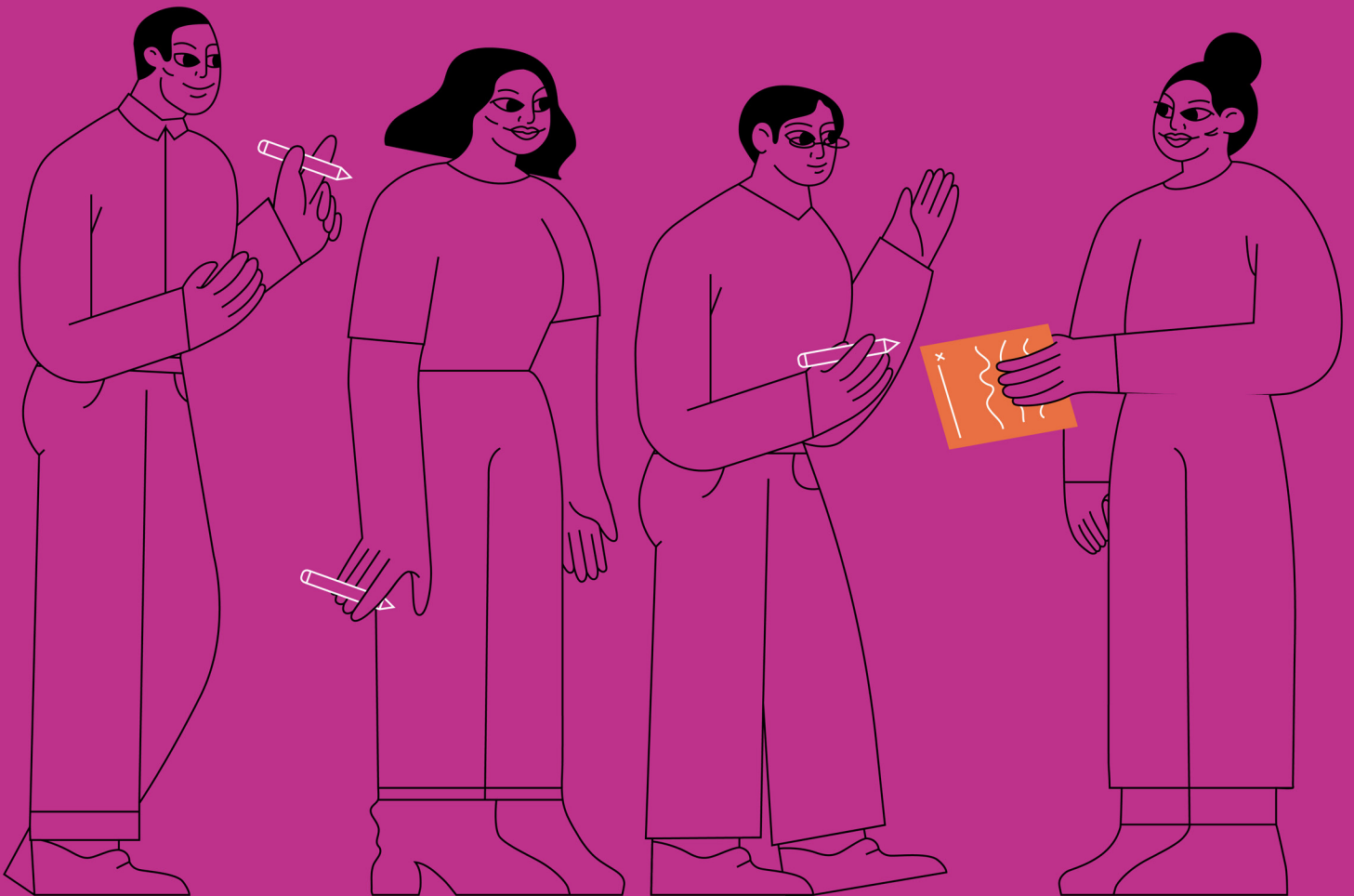
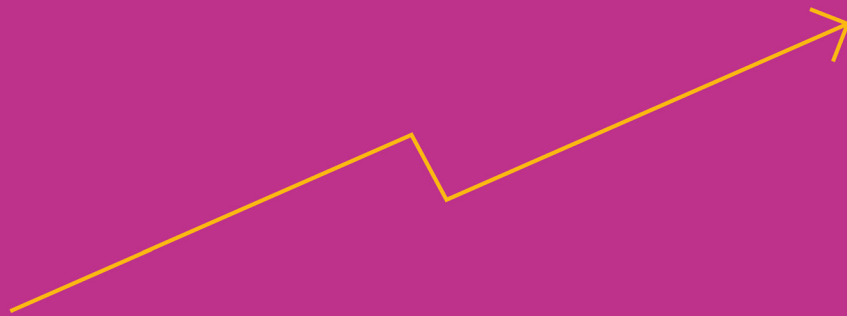
[A Practical Guide to Diversity and Inclusion for Startups](#)

- 5. Get real about how diverse and inclusive your start-up is, or is not.** Start by measuring how diverse and inclusive your workforce is today so you can track progress as you start your own diversity and inclusion journey. Introduce a self-ID survey for new employees and create feedback loops either through regular listening sessions or employee engagement and inclusion surveys [\(SEE ACTION 6\)](#).
- 6. Proactively create systems that minimize bias and promote equity.** For example, create a policy to interview diverse candidate slates for all open roles. When establishing your performance-review system, learn from the mistakes of larger companies and introduce bias-checking processes from the beginning. Start-ups have the benefit of creating a lot of systems from scratch—ensure you're thinking about creating equitable outcomes from day one.
- 7. Construct a diverse board of directors, advisory board, and leadership team.** If you are serious about diversity and inclusion in your start-up, hire diverse directors and seek diverse advisory board members. Companies with diverse management teams achieve 19% higher revenue from innovation. Diversity in leadership sends a message to candidates and employees that your company values diversity and often attracts talent.

Sustaining Change

Tech Equity Accountability Mechanism (TEAM) 133

Requirements to Become an ACT Report Signatory 135



Tech Equity Accountability Mechanism

The recommendations outlined in this report and the commitment by individual companies to implement them are powerful first steps to make the tech industry more equitable. But individual companies alone will not accelerate change at the pace we need. The industry must pool skills and knowledge, boost innovation, drive higher standards, and create positive accountability.

Recent research by McKinsey & Company to mark the first anniversary of George Floyd's death states that collective work is critical to make progress on equity. The most promising way to create broad permanent change is through collective action that brings together public, private, and social-sector stakeholders.²⁹³ Furthermore:

- Success often relies on a backbone structure—a core group that regularly convenes stakeholders, builds consensus, and coordinates action.
- This group should collect data, disseminate knowledge, and identify programs to scale, then track overall progress and publicize results.

The ACT Report recognizes the need to collectively operationalize equity work. We therefore propose the establishment of a new industry organization to support all current and future signatories of this report in delivering their commitments to increase equity.

SUMMARY

To help advance the goals of this report and ensure companies have the support needed to implement its recommendations, the Aspen Institute is developing a complementary effort that will collaborate with the industry to develop standards for accountability and transparency. This project, the Tech Equity Accountability Mechanism (TEAM), will serve as a comprehensive clearinghouse of research and best practices on DEI and provide access to expert consultation for tech companies of all sizes. TEAM will highlight success stories within tech companies, as well as gaps or challenges to be addressed at an industry level.

By supporting the creation of TEAM, companies will send a clear signal to consumers, employees, communities, and policy-makers that the tech industry is now moving to a more ambitious and rigorous stage in its approach to DEI.

TEAM OBJECTIVES

TEAM will work with signatory tech companies to:

1. Establish industry standards for DEI reporting.²⁹⁴
 2. Measure the industry's progress toward tangible DEI goals transparently and fairly.
 3. Deliver experiments to drive innovation in DEI and identify strategic approaches with a multiplier effect.
 4. Provide referrals and connections to organizations that support company-wide change on DEI.
 5. Undertake ethical and inclusive research to create a repository of DEI expertise and learnings, specifically tailored to a business environment with a technical workforce.
-

HOW TO SUPPORT TEAM

Signatories to the ACT Report are invited to become members of TEAM (though there's no requirement for signatories to join TEAM; TEAM will be a coalition of the willing). TEAM will be incubated in the Aspen Institute with support from BSR²⁹⁵ and spun out as a separate 501(c)(3) organization over the next two years. Participating companies will be asked to share their DEI data, best practices, and case studies with TEAM staff over those two years with the goal of developing an industry-wide DEI accountability framework. Companies will be asked to join conversations to align on DEI data collection, and determine mutually beneficial areas for cross-industry DEI work.

Requirements to Become an ACT Report Signatory

As the breadth of recommendations in this report makes plain, the tech industry’s journey toward equity requires long-term collective effort and determined leadership at all levels. Some companies have the resources to move quickly and sweepingly, while others may need to begin by focusing on just a few core areas. At the same time, this work cannot move forward unless the industry as a whole commits to specific, concrete, and transparent actions.

ALL SIGNATORIES MUST PLEDGE TO ACT ON THREE LEVELS:

1. As an individual company.
2. In coordination with industry peers.
3. As part of a whole-of-society approach—alongside educational institutions, impacted communities, and government institutions—with the objective to boost equity.

AS A COMPANY

We will review existing DEI practices and gaps, and identify the most relevant actions from the ACT Report that can be incorporated into new or existing DEI efforts to operationalize DEI throughout the business.

M 1. MODEL AND INCENTIVIZE INCLUSIVE LEADERSHIP

O 2. OPERATIONALIZE DEI THROUGHOUT THE BUSINESS

OUTCOMES, ONE YEAR LATER

Publish an annual progress update, either within the company’s Diversity Annual Report or separately. This will detail successes and challenges in meeting DEI goals, share DEI data, hold executive leadership accountable, and set new goals for the next year.

AS AN INDUSTRY

We will work together to standardize DEI reporting, data-sharing, and independent accountability efforts, as well as publicly amplify diverse voices across the industry while collectively addressing issues of systemic racism and inequity.

S 3. SHARE DEI DATA, METRICS, AND GOALS

OUTCOMES, ONE YEAR LATER

Establish an industry entity that supports tech companies by boosting innovation and ambition in DEI, standardizing DEI reporting, providing easy access to best practices, and improving accountability. Companies that sign the ACT Report agree to share their anonymized DEI data* and participate in conversations to develop industry standards.

AS A COMMUNITY

We will advocate for policies that create pathways into tech for underrepresented communities and increase access to capital for diverse entrepreneurs.

T 4. TRANSFORM PATHWAYS INTO TECH FOR UNDERREPRESENTED TALENT

OUTCOMES, ONE YEAR LATER

Deepen relationships and collaboration between policy-makers, private industry, and impacted communities on programs that lead to tangible improvements for students and prospective tech workers.

*If companies already have the infrastructure to collect demographic data, best practice requires anonymized data on representation, hiring, and attrition, cut intersectionally by gender, race/ethnicity, leadership (Director+), and disaggregated between tech and non-tech. For companies not yet collecting this range of DEI demographic data, the minimum requirement to become an ACT Report signatory is the provision of representation data cut by race/ethnicity and gender, with a longer-term commitment to provide limited data intersectionally. Although companies are encouraged to publicly report this data, public reporting of these metrics is not a prerequisite to becoming an ACT Report signatory. TEAM will aggregate company data to provide the most reliable view yet of DEI across the tech industry. TEAM will not publish data at company level.

Appendix

Acknowledgments	137
Glossary	139
A Detailed Summary of Tool Kits	144
Endnotes	149



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Glossary

A

AFFIRMATIVE ACTION PLANS (AAPs)

Written plans that are required of federal contractors or subcontractors that have 50 or more employees with contracts of \$50,000 or more. Other organizations can elect to have AAPs. An AAP ensures that there is documentation outlining the company's steps to ensure DEI and setting goals for the following year based on previous year's data.

ALLYSHIP

The ongoing action of supporting others. It is an active practice where a person with privilege in a particular situation seeks to help a group or individuals with less privilege—usually those who are underrepresented and face institutional and interpersonal barriers due to their identity.

B

BELONGING

Occurs when people have a stake or say in the construction or reconstruction of that institution, structure, group, or community. They share a level of responsibility, power, agency and care for the institution and are valued, seen, and heard. It's this process of co-creation and full participation that creates the feeling of belonging.²⁹⁶

BIAS

A tendency to believe that some people, ideas, etc., are better than others, and that usually results in treating some people unfairly.

BLACK LIVES MATTER (BLM)

A **movement**²⁹⁷ that was founded by Patrisse Cullors, Alicia Garza, and Opal Tometi in 2013 in response to the acquittal of Trayvon Martin's murderer, and has since grown into a worldwide movement. Its aims are freedom, liberation, and justice for the Black community.

BUSINESS RESOURCE GROUP (BRG)

A voluntary, employee-led group organized around a particular shared background, interest, or issue. See also Employee Resource Group.

C

CHIEF DIVERSITY OFFICER (CDO)

An executive in the C-suite that focuses on operationalizing diversity, equity, and inclusion in their company or workplace.

COLOR-BLIND HIRING

Viewing candidates as the same, regardless of their racial, ethnic, or cultural identities.

COMPUTER SCIENCE (CS)

The discipline of learning, using, and teaching the science of computers, including algorithmic functions, data, use, and hardware.

C-SUITE

The executive level managers of a company, often including the Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Business Officer (CBO), and others.

D**DIVERSE SUPPLIER SPEND**

The procurement dollars spent on businesses owned by people from underrepresented groups, often expressed as a proportion of total procurement spending.

DIVERSITY

The state of having people of different races, cultures, etc., in a group or organization.²⁹⁸

DIVERSITY, EQUITY, AND INCLUSION (DEI)

An approach recognizing the interconnectedness of diversity, equity, and inclusion, and the importance of striving for equitable outcomes when trying to make progress in diversity and inclusion. DEI is a common function in organizations. See individual definitions for Diversity, Equity, and Inclusion.

E**EMPLOYEE RESOURCE GROUP (ERG)**

A voluntary, employee-led group organized around a particular shared background, interest, or issue. See also Business Resource Group.

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION (EEOC)

The U.S. Government office responsible for enforcing federal laws around the illegality of discrimination in the workplace, including firing, hiring, harassment, wages, training, and benefits. In the U.S. it is illegal to discriminate against a job applicant or employee for any reason based on the person's race, color, religion, sex, origin, age, or disability/genetic information.

EQUITY

The guarantee of fair treatment, access, opportunity, and advancement for all, while at the same time striving to identify and eliminate barriers that have prevented the full participation of some groups. The guiding principle of equity acknowledges that there are marginalized and underrepresented populations and that fairness (not necessarily equal treatment) regarding these unbalanced conditions is needed to ensure that all groups have equal access to opportunities.²⁹⁹

EQUITY ADVOCATES

Individuals or organizations that take action personally and/or collectively to create a more inclusive culture.

ETHICS-BASED APPROACH

A framework for decision-making in situations where right and wrong, good and bad, are not clearly defined. This framework addresses issues of fairness and social justice where different schools of thought and ethical standards exist; when various choices can be made, and different paths can be chosen. Different traditions, cultures, countries, and religions may choose different outcomes and priorities suited to specific needs and sensitivities.

G

GENDER IDENTITY

A socially constructed system of classification that ascribes qualities and behaviors that are expected to align with a person's biological sex. Gender is often conflated with sex; however, this is inaccurate, because sex refers to bodies (i.e., male, female, intersex) and gender identity includes one's sense of self and the interplay of physical, emotional, and biological traits. Gender identity characteristics can change over time and are different between cultures. Words that describe gender include man, woman, cisgender, transgender, masculine, feminine, non-binary, and gender queer.³⁰⁰

GROWTH-MINDSET

Believing that talent and ability are not fixed or predetermined, but that we can grow and change through "hard work, good strategies, and input from others."³⁰¹

H

HISPANIC/LATINX

Hispanic refers to people with Spanish-speaking origins. Latino/a historically refers to people from Latin America. However, Latinx has grown in use and acceptance as the gender-expansive term for people from this region, as it is inclusive of transgender and non-binary individuals. Hispanic does not include Latin Americans of Portuguese origin or Portuguese speakers (e.g., Brazilians). Some Hispanic/Latinx people find the term Hispanic problematic due to Spain's colonial history.³⁰² While there has been growing use of the term Latinx among younger and LGBTQ+ communities, the vast majority of Hispanic/Latinx Americans today refer to themselves as Hispanic.³⁰³

HUMAN-RIGHTS-BASED APPROACH

Focusing on the experiences of the most vulnerable and a holistic recognition of what all members of society need in order to live with dignity and thrive. Based on internationally recognized laws and standards; a common standard of achievement for all people—established rights that should always be protected and respected.

I

INCLUSION

The act or practice of creating environments in which an individual or group can be and feel welcomed, respected, supported, and valued to fully participate.

INCLUSIVE CULTURE

A system where all members can thrive, feel a sense of belonging, contribute their abilities and perspectives, and receive credit and recognition for these contributions.

INTERSECTIONALITY

The way people's social identities overlap to create multiple levels of privilege, power, inequality, or discrimination.

L

LATINX/HISPANIC

See Hispanic/Latinx.

LGBTQ+

An acronym often used as a catch-all term to include people who identify as Lesbian, Gay, Bisexual, Trans, Queer + Questioning, intersex, pansexual, two-spirit (2S), androgynous, asexual, and/or any other sexual identity group.

M

MACHINE LEARNING (ML)

A subset of Artificial Intelligence (AI), and enables machines to learn how to solve problems or complete tasks by themselves.

MANSFIELD RULE

An initiative conducted by Diversity Lab and adopted by law firms to ensure that at least 30% percent of candidates for leadership positions are women, from underrepresented racial and ethnic groups, LGBTQ+, or people with disabilities.³⁰⁴

MARKET AVAILABLE TALENT POOL (MATP OR MAT)

The pool of workers who could realistically be hired for a given role based on the requisite skills, education, experience, and, in some cases, geography required for that role.

MERITOCRACY

An organizational system that promotes workers and winners on the basis of ability or skill (merit). While long believed to be “fair,” it ranks those with access to privilege above others (see Preparatory Privilege).

MICROAGGRESSIONS

Remarks, questions, or actions that are painful, demeaning, or insensitive because they have to do with a person’s perceived membership of a group that is marginalized or subject to stereotypes. They can happen casually, frequently, and without intent to cause harm. They can even be meant as a compliment or a joke—which is why they can often feel confusing and disconcerting.

MINIMUM VIABLE PRODUCT

The version of a new product with just enough features to be usable by early customers, who can then provide feedback for future product development. It allows a team to collect the maximum amount of information with the least effort.³⁰⁵

N

N-COUNTS

Usually refers to the number of units in a sample size, e.g., the number of employees, products, households, or any other group under observation.

P

PARADIGM SHIFT

A fundamental change in approach or underlying assumptions.

PEDAGOGICAL CONTENT KNOWLEDGE (PCK)

The synthesis of an educator’s pedagogical or teaching knowledge of the profession of teaching and knowledge of the subject matter.

PREPARATORY PRIVILEGE

The perception of enhanced ability, usually reserved for those who attended well-resourced schools that provide rigorous preparation.

PRODUCT INCLUSION

Creating products and services that reflect the world around us. It involves keeping the diversity of users in mind when developing your products and services so that they work for everyone and not just the majority.

R

RACE-CONSCIOUS HIRING

Hiring measures that actively take into account a person’s racial or ethnic identity.

ROONEY RULE

A U.S. National Football League policy requiring teams to interview ethnic-minority candidates for head coaching and senior football operation jobs (e.g., general manager).

S

SMART GOALS

Goals that are Specific, Measurable, Attainable/Achievable, Realistic, and Time-bound. These are useful standards in generating goals that can be accomplished.

SYSTEMIC RACISM

How the practices, policies, behaviors, and norms that perpetuate racial group inequity and racism are baked into the systems themselves. This isn't about individuals behaving in racist ways. It is about how even well-meaning people end up participating in systems that are inherently racist. It is a structural problem that requires a structural solution.³⁰⁶ See these resources: [“Structural and Systemic Racism”](#) from the Aspen Institute, [“Unearthing the Roots of Systemic Racism”](#) from Insead Business School, and [“The Roots of Structural Racism”](#) from the Othering & Belonging Institute.

SYSTEMS THINKING

An approach that requires one to analyze events and patterns of behavior over time, and then identify “high leverage points” on areas that will drive greatest change.

T

TALENT MYTH

An untrue belief that a person's ability is a fixed asset and something that people either have or don't have. In fact, talent grows with exposure, repeated practice, and the experience of being stretched and challenged.

U

UNDERREPRESENTED GROUPS

Groups that are less represented in one subset (e.g., the workplace) than their representation in the general population. These groups have often been excluded due to systemic barriers, and may be at the margins of power—often women, LGBTQ+ communities, Black, Indigenous, people of color, people with disabilities, or those with the least wealth.

A Detailed Summary of Tool Kits

M 1. Model and incentivize inclusive leadership

ACTION 1. Increase your personal DEI expertise.

- **3i Framework: Internal, Interpersonal, Institutional: the individual path to impact and allyship.** https://assets.ctfassets.net/ngit5gcrb661/14alddExUK6KlqtLymTg9h/d0e99afad5fa46c6ace96ca2e2362c81/Snap_3i_Framework_for_DEI.pdf.
- **Better Allies: 5 Ally Actions Newsletter.** <https://betterallies.com/more-content>.
- **Culture Amp: Why sharing gender pronouns at work matters.** <https://www.cultureamp.com/blog/gender-pronouns-in-workplace>.
- **"I've started acknowledging the people who lived on this land first—and you should, too".** <https://theconversation.com/ive-started-acknowledging-the-people-who-lived-on-this-land-first-and-you-should-too-118496>.
- **MyPronouns.org: Resources on personal pronouns.** <https://www.mypronouns.org>.
- **NCWIT: 13 Tips for Having Conversations About Flexible Work: For Managers.** <https://www.ncwit.org/resources/ncwit-tips-13-tips-having-conversations-about-flexible-work-options-managers-0>.
- **NCWIT: Building More Inclusive Cultures for Work While We're at Home.** <https://ncwit.org/blog/building-more-inclusive-cultures-at-work-while-were-at-home>.
- **NCWIT: Critical Listening Guide: Just Because You Always Hear It, Doesn't Mean It's True.** <https://ncwit.org/resource/criticallistening>.
- **NCWIT: Guide for Male and Majority Group Allies and Advocate.** <https://ncwit.org/resource/ma-toolkit>.
- **NCWIT: Interrupting Bias in Industry Settings.** <https://ncwit.org/resources/interrupting-bias-in-industry-settings>.
- **NCWIT Supervising-in-a-Box Series: Employee Development.** <https://ncwit.org/resource/supervising-in-a-box-series-employee-development>.
- **NCWIT Supervising-in-a-Box Series: Supervisors as Change Agents.** <https://ncwit.org/resource/supervising-in-a-box-series-supervisors-as-change-agents>.
- **NCWIT Supervising-in-a-Box Series: Team/Project Management.** <https://ncwit.org/resource/supervising-in-a-box-series-team-project-management>.
- **"Our home on native land."** <https://native-land.ca/resources/territory-acknowledgement>.
- **Race Ahead Newsletter.** <https://fortune.com/newsletter/raceahead>.

ACTION 2. Establish DEI as a business imperative.

- **A Quick Guide to Building a Supplier Diversity Policy.** <https://blog.cvmsolutions.com/a-quick-guide-to-building-a-supplier-diversity-policy>.
- **Intel Supplier Diversity Quick Start Guide.** <https://www.intel.com.br/content/dam/www/public/us/en/documents/corporate-information/external-supplier-diversity-quick-start-guide.pdf>.

O 2. Operationalize DEI throughout the business

ACTION 3. Support DEI with funding, metrics, strategies, and accountability.

- **7 Steps to an Effective Pay Equity Audit.** <https://hrexecutive.com/follow-these-7-steps-to-an-effective-pay-equity-audit>.
- **Conducting a Pay Equity Audit.** <https://www.skadden.com/insights/publications/2019/09/conducting-a-pay-equity-audit>.
- **How to Identify—and Fix—Pay Inequality at Your Company.** <https://hbr.org/2020/11/how-to-identify-and-fix-pay-inequality-at-your-company>.

ACTION 4. Redesign systems, including hiring, retention, and promotion systems, to remove bias.

- **Applied:** recruitment platform, diversity recruiting tools. <https://www.beapplied.com>.
- **Disability:IN Fact Sheets: BRG Ableism/Audism.** <https://disabilityin.org/resource/brg-ableism-audism-fact-sheet/>
- **Disability:IN Fact Sheets: BRG Executive Sponsor Role.** <https://disabilityin.org/resource/brg-executive-sponsor-role-fact-sheet/>
- **Disability:IN Fact Sheets: BRG Facility Access.** <https://disabilityin.org/resource/brg-facility-access-fact-sheet/>
- **Disability:IN Fact Sheets: BRG Intersectionality.** <https://disabilityin.org/resource/brg-intersectionality-fact-sheet/>
- **ERGs: Indeed Guide to Employee Resource Groups.** <https://www.indeed.com/hire/c/info/employee-resource-groups>
- **ERGs: Interview with Diversity Consultant Leah Kiayo.** <https://affinityincmagazine.com/whats-the-trend-with-ergs-and-brgs>
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<http://cdi.brighamandwomens.org/wp-content/uploads/2020/09/How-to-Take-the-Bias-Out-of-Interviews.pdf>.
- **Mercer Report ERGs Come of Age: The Evolution of Employee Resource Groups, January 2011.** <https://docplayer.net/5069891-Ergs-come-of-age-the-evolution-of-employee-resource-groups.html>
- **The Re-Do Interview.** <https://karat.com/blog/post/how-to-prepare-for-a-remote-technical-interview>.
- **NCWIT: Reducing Unconscious Bias in Performance Review Instruments (Checklist).**
<https://ncwit.org/resources/reducing-unconscious-bias-in-performance-review-instruments-checklist>.
- **NCWIT: Reducing Unconscious Bias When Conducting Performance Reviews (Checklist).**
<https://ncwit.org/resources/reducing-unconscious-bias-when-conducting-performance-reviews-checklist>.
- **NCWIT Supervising-in-a-Box Series: Employee Recruitment/Selection.**
<https://ncwit.org/resource/supervising-in-a-box-series-employee-recruitment-selection>.
- **NCWIT: Tips for Reducing Bias in Performance Evaluation.**
<https://ncwit.org/resources/tips-for-reducing-bias-in-performance-evaluation>.
- **pymetrics:** talent matching platform. <https://www.pymetrics.ai>.
- **re:Work—Guide: Use structured interviewing.**
<https://rework.withgoogle.com/guides/hiring-use-structured-interviewing/steps/introduction>.

ACTION 5. Apply both a DEI framework and an ethical framework to the design of products and services.

- **A11Y Project Audit Checklist for Web Content Accessibility Guidelines (WCAG) compliance.**
<https://www.a11yproject.com/checklist>.
- **Accessible by Design.** <https://accessible-communications.com>.
- **AI Fairness 360** by IBM. <https://aif360.mybluemix.net>.
- **Algorithmic Justice League: Equitable and Accountable AI.** https://global-uploads.webflow.com/5e027ca188c99e3515b404b7/5e332b739c247f30b4888385_AJL%20101%20Final%20_1.22.20.pdf.
- **Berkeley Haas: Mitigating Bias in Artificial Intelligence.**
<https://haas.berkeley.edu/equity/industry/playbooks/mitigating-bias-in-ai>.
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- **Disability:IN: Digital Accessibility Statement Best Practices.**
<https://disabilityin.org/resource/digital-accessibility-statement-best-practices>.
- **Disability:IN: Accessible Technology Procurement Toolkit.** <https://private.disabilityin.org/procurementtoolkit>.
- **Free the Work.** <https://freethework.com>.
- **Girlgaze.** <https://girlgaze.com>.
- **Inclusive Toolkit Manual.** https://download.microsoft.com/download/b/0/d/b0d4bf87-09ce-4417-8f28-d60703d672ed/inclusive_toolkit_manual_final.pdf.

- [PredictiveHire’s FAIR framework.](https://content.predictivehire.com/hubfs/PredictiveHire%20-%20FAIR%20Framework%20%7C%202021.pdf)
[https://content.predictivehire.com/hubfs/PredictiveHire%20-%20FAIR%20Framework%20%7C%202021.pdf.](https://content.predictivehire.com/hubfs/PredictiveHire%20-%20FAIR%20Framework%20%7C%202021.pdf)
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- [The Business Case for Product Inclusion Design Practices.](https://hbr.org/resources/pdfs/comm/google/ProductInclusion.pdf)
[https://hbr.org/resources/pdfs/comm/google/ProductInclusion.pdf.](https://hbr.org/resources/pdfs/comm/google/ProductInclusion.pdf)
- [Unstereotype Alliance.](https://www.unstereotypealliance.org/en) [https://www.unstereotypealliance.org/en.](https://www.unstereotypealliance.org/en)
- [What is Inclusive Design? A Beginner’s Guide.](https://careerfoundry.com/en/blog/ux-design/beginners-guide-inclusive-design)
[https://careerfoundry.com/en/blog/ux-design/beginners-guide-inclusive-design.](https://careerfoundry.com/en/blog/ux-design/beginners-guide-inclusive-design)

S 3. Share DEI data, metrics, and goals

ACTION 6. Support industry-wide DEI reporting standards and share anonymized data.

- [Culture Amp x Paradigm Inclusion Survey.](https://www.cultureamp.com/blog/diversity-and-inclusion-survey) [https://www.cultureamp.com/blog/diversity-and-inclusion-survey.](https://www.cultureamp.com/blog/diversity-and-inclusion-survey)
- [Disability:IN: Self-Identification Best Practices.](https://disabilityin.org/resource/best-practices-self-identification) [https://disabilityin.org/resource/best-practices-self-identification.](https://disabilityin.org/resource/best-practices-self-identification)
- [Project Include—Recommendations on Measuring Progress.](https://projectinclude.org/measuring_progress) [https://projectinclude.org/measuring_progress.](https://projectinclude.org/measuring_progress)
- [Survey Monkey Recommendations.](https://www.surveymonkey.com/mp/diversity-and-inclusion-guide/#measuring-diversity-inclusion)
[https://www.surveymonkey.com/mp/diversity-and-inclusion-guide/#measuring-diversity-inclusion.](https://www.surveymonkey.com/mp/diversity-and-inclusion-guide/#measuring-diversity-inclusion)

ACTION 7. Set public goals.

- [Culture Amp: employee engagement surveys.](https://www.cultureamp.com) [https://www.cultureamp.com.](https://www.cultureamp.com)
- [Culture Amp x Paradigm Inclusion Survey: inclusion surveys.](https://www.cultureamp.com/blog/diversity-and-inclusion-survey)
[https://www.cultureamp.com/blog/diversity-and-inclusion-survey.](https://www.cultureamp.com/blog/diversity-and-inclusion-survey)
- [Humu: employee engagement surveys.](https://www.humu.com) [https://www.humu.com.](https://www.humu.com)
- [Peakon: employee engagement surveys.](https://peakon.com/us) [https://peakon.com/us.](https://peakon.com/us)
- [Pluto: inclusion surveys.](https://pluto.life) [https://pluto.life.](https://pluto.life)
- [SurveyMonkey x Paradigm Inclusion Survey: inclusion surveys.](https://www.surveymonkey.com/mp/inclusion-survey-template)
[https://www.surveymonkey.com/mp/inclusion-survey-template.](https://www.surveymonkey.com/mp/inclusion-survey-template)

T 4. Transform pathways into tech for underrepresented talent

ACTION 8. Advocate for computer science (CS) to be required in all schools.

ACTION 9. Build systems capacity to create more CS teachers at all levels, and invest in CS faculty within colleges of education.

ACTION 10. Invest in organizations that connect talent from underrepresented groups to tech careers.

- [81cents.](https://www.81cents.com) Provides affordable, accessible, virtual negotiation support and data for women and other underrepresented minorities. [https://www.81cents.com.](https://www.81cents.com)
- [AccessComputing.](https://www.washington.edu/accesscomputing) Increases the participation of people with disabilities in computing fields.
[https://www.washington.edu/accesscomputing.](https://www.washington.edu/accesscomputing)
- [American Indian Science and Engineering Society \(AISES\).](https://www.aises.org) Focuses on substantially increasing the representation of Indigenous peoples in science, technology, engineering, and math (STEM). [https://www.aises.org.](https://www.aises.org)

- **AnitaB.org**. Connects, inspires, and guides women in computing and in organizations that view technology innovation as a strategic imperative. <https://anitab.org>.
- **Association for Computing Machinery (ACM and ACM-W)**. Advances computing as a science and profession, with more than 680 student chapters around the world. <https://www.acm.org/chapters/find-a-chapter>.
- **Bitwise Industries**. Helps upskill students and people typically left out of the tech industry, which transforms the economies of each city Bitwise serves. <https://bitwiseindustries.com>.
- **Black Girls Code**. Builds pathways for young women of color by introducing them to skills in computer programming and technology. <https://www.blackgirlscodes.com>.
- **Black Girls Do Engineer Corporation**. Develops Black American girls and young women in all areas of STEM through leadership, mentorship, critical thinking projects, STEM design and experiments, and life skills. <https://www.blackgirlsdoengineer.org>.
- **BlackcomputHER**. Supports computer and tech education and workforce development for Black women and girls. <https://blackcomputeher.org>.
- **Break Through Tech**. Removes obstacles that keep women from the tech talent pipeline. <https://breakthroughtech.org>.
- **BridgeUP STEM**. Provides opportunities for girls, women, and gender non-conforming individuals of all backgrounds to learn the skills of computer science and research methodology within a research university setting. <https://ncwit.org/program/bridgeup-stem>.
- **Center for Minorities and People With Disabilities in IT (CMDiT)**. Offers resources, programming and leadership initiatives, and national scale projects to foster innovation through inclusion. <https://cmd-it.org>.
- **Code with Google**. Connects students from underrepresented groups to computer science education and the tools they need to build skills for the future. <https://edu.google.com/code-with-google>.
- **CodeHouse**. Focuses on cultivating a strong pipeline between students of color and industry-leading technology companies to build the next generation of diverse tech leadership. <https://www.thecodehouse.org>.
- **CodePath**. Transforms college computer science education for underrepresented minorities and underserved populations in order to eliminate educational inequity in technical careers. <https://codepath.org>.
- **Code.org**. Expands access to computer science in schools and increases participation by young women and students from other underrepresented groups. <https://code.org>.
- **ColorStack**. Offers community building, academic support, and career development for Black and Latinx college CS students. <https://www.colorstack.org>.
- **Computer Science Teachers Association**. Community of computer science teachers that prepares teachers to offer high-quality classroom experiences. <https://www.csteachers.org>.
- **Computing Alliance of Hispanic-Serving Institutions (CAHSI)**. Addresses the low representation of Hispanics in computing in both higher education and the workforce. <https://cahsi.utep.edu>.
- **Computing Research Association**. Joins with industry, government, and academia to strengthen research and advanced education in computing. <https://cra.org/about>.
- **CSforALL**. Connects providers, schools and districts, funders, and researchers working toward the goal of providing quality CS education to every child in the United States. <https://www.csforall.org>.
- **Diversity Lab**. Incubator for innovative ideas and solutions that boost diversity and inclusion in law. <https://www.diversitylab.com>.
- **Girls Who Code**. Building the world's largest pipeline of future female engineers. <https://girlswhocode.com>.
- **Institute for Women's Policy Research**. National think tank that builds evidence for policies that grow women's power and influence, close inequality gaps, and improve the economic well-being of families. <https://iwpr.org>.
- **Internet Association**. Trade association that exclusively represents leading global internet companies on matters of public policy. <https://internetassociation.org>.
- **Kapor Center**. Family of organizations that pursue innovative strategies to leverage capital, talent, and technology for positive social impact. <https://www.kaporcenter.org>.
- **Last Mile Education Fund**. Increases diversity in tech and engineering fields by addressing critical gaps in financial support for low-income, underrepresented students within four semesters of graduation. <https://www.lastmile-ed.org>.
- **LA-Tech.org**. Aims to bring the tech community together around common civic goals and to bring economic opportunities to LA's underserved communities through four pillars: educate, mobilize, connect, and amplify. <https://la-tech.org>.

- **Management Leadership for Tomorrow.** Supports a pipeline of Black, Latinx, and Native American undergraduate, graduate, and management-level talent through its playbook, coaching, and networking programming. <https://mlt.org>.
- **Multiverse.** Customizes apprenticeship programs to train entry-level talent and upskill existing employees according to company needs. <https://www.multiverse.io/en-US>.
- **Natives Rising.** Bridges the gap between tech and Indigenous communities by providing community, networking, and career coaching. <http://www.joinnativesrising.com>.
- **NCWIT Aspirations in Computing.** A program that supports girls and women in getting into the field of computing—and staying there. <https://www.aspirations.org>.
- **NSBE.** Supports and promotes the aspirations of collegiate and precollegiate Black engineer students and technical professionals in engineering and technology. <https://www.nsbe.org/home.aspx>.
- **oStem.** Professional association for LGBTQ+ people in the STEM community offering scholarship, leadership, and mentorship programming, as well as an annual conference. <https://www.ostem.org>.
- **PledgeLA.** A collective of 215+ LA-based tech companies and VC firms working to increase equity and accountability in the local ecosystem, a partnership by the Annenberg Foundation and the City of LA. <https://pledgela.org>.
- **Reboot Representation.** Coalition of tech companies committed to doubling the number of Black, Latina, and Native American women graduating with computing degrees by 2025. <https://www.rebootrepresentation.org>.
- **SHPE/MAES.** Fosters Hispanic leadership in the STEM field through mentorship, webinars, resource groups, networking opportunities, and more. <https://www.shpe.org>.
- **Society of Women Engineers.** Empowers women to succeed and advance in engineering and be recognized for their life-changing contributions as engineers and leaders. <https://swe.org>.
- **STARS Computing Corps.** Broadens participation of underrepresented groups in computing within institutions of higher education. <http://www.starscomputingcorps.org>.
- **TECHNOLOchicas.** National initiative of NCWIT and Televisa Foundation designed to raise awareness among young Latinas and their families about opportunities and careers in technology. <https://technolochicas.org>.
- **WiCyS.** Brings talented women together to celebrate and foster their passion and drive for cybersecurity. <https://www.wicys.org>.
- **WorkingNation.** Seeks to galvanize the public will and mobilize critical resources to mitigate the growing employability gap in America. <https://workingnation.com>.

Venture Capitalists and Start-Ups

Venture Capitalists

- **Advancing Gender Equality in Venture Capital: Executive Summary.** https://wapp.hks.harvard.edu/files/wapp/files/advancing_gender_equality_in_vc_executive_summary.pdf.
- **The Diversity VC Standard.** <https://www.diversity.vc/the-diversity-vc-standard>.
- **Harvard Kennedy School's research on Venture Capital and Entrepreneurship.** <https://wapp.hks.harvard.edu/venture-capital-and-entrepreneurship>.

Start-Ups

- **Culture Amp x Paradigm Inclusion Survey.** <https://www.cultureamp.com/blog/diversity-and-inclusion-survey>.
- **Justworks DEI Resource Center** for small and medium-sized businesses. <https://justworks.com/guides/dei-guide>.
- **A Practical Guide to Diversity and Inclusion for Startups.** <https://diversityq.com/a-practical-guide-to-diversity-and-inclusion-in-startups-1510036>.

Endnotes

INTRODUCTION

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SECTION II: RECOMMENDATIONS

1. MODEL AND INCENTIVIZE INCLUSIVE LEADERSHIP

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3. SHARE DEI DATA, METRICS, AND GOALS

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