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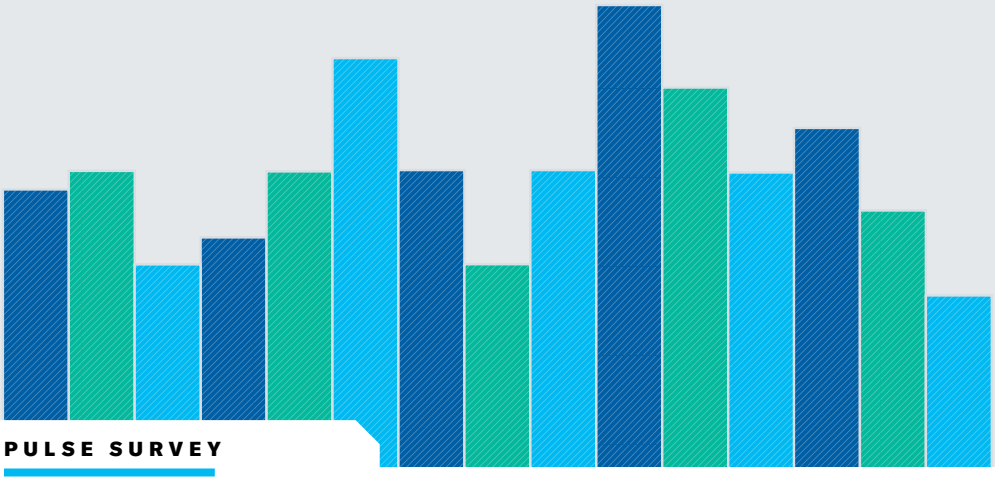

PULSE SURVEY

The Path to More Diverse Technical Talent

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My cofounder, Mohit Bhende, and I started Karat to unlock opportunities by changing the way people get jobs. We conduct technical interviews that are predictive and fair. We hope that Karat's process contributes to diversity, equity, and inclusion, but we know that inclusivity doesn't start—or stop—at the interview.

We commissioned this research with Harvard Business Review Analytic Services to look beyond the interview to learn what's working and what isn't as companies start to prioritize inclusivity.

The good news is that most companies are trying. The "less good news" is that the strategy they're most likely to try is the least likely to work. Although 65% of those surveyed said they specifically recruit from underrepresented groups, only 37% said it's actually increasing diversity.

This result is because recruiting doesn't change the underlying assumptions in the system.

For example, the totally subjective idea of "culture fit" is still prevalent. Pedigree bias gives preference to applicants from a narrow set of schools and employers. Organizations prioritize referrals, which leads to a chain of in-group hires.

We need to stop believing that the best way to hire is to ask one MIT grad to recommend another MIT grad who all the MIT grads agree is likely to "fit in." Then efforts to recruit from underrepresented groups might begin to pay off.

One promising finding is that, during Covid-19, remote work has been a game changer for organizations building diverse teams. Simply letting people work on their terms versus on your terms (e.g., moving from Atlanta to Palo Alto) made a big difference.

This development makes me optimistic about what might happen when we start to chip away at other exclusionary assumptions about the "right" way to build a company.

The tech industry is known for innovation. But the industry itself needs innovation. Can it find a way to be more equitable, more effective, and meet the needs of the future? It can, and it will. I am confident in this answer because tech has no choice but to innovate; there is so much demand for software engineers that hiring in the same old ways won't work much longer.

Inclusive companies will unlock competitive advantages in the race to build the world's best engineering teams. Will yours be one of them?

Read on for invaluable strategies for making your technical hiring more effective, and for making our digital world more equitable.

Jeffrey Spector
Cofounder and President
Karat

The Path to More Diverse Technical Talent

Lack of diversity has been a persistent problem in technical fields—including in engineering, computer science, and information technology. Despite the tech industry's pledges to diversify these professions, the proportion of non-whites and women remains stubbornly low. According to data from the U.S. Bureau of Labor Statistics, for instance, in 2020, 64% of computer programmers were white, 21% were women, and 6% were Black or African American.[1]

Events of the past 18 months have prompted increased attention to racial inequities and social injustice, not only in the public consciousness but also in the corporate boardroom. In response, company executives have spoken out about these issues and expressed renewed commitments to diversity, including in their technical workforce.

A Harvard Business Review Analytic Services survey of 309 respondents in early 2021 indicates that many companies also are using the pandemic-induced shift to remote work to try to increase the diversity of their technical staffs. Half the respondents report that their organization has launched new initiatives or expanded existing ones specifically to diversify technical teams. Among the most frequently cited programs are those that involve remote interviewing and remote work roles.

"The pandemic and the changes it has brought about in how work gets done provide an unprecedented opportunity for a turning point," wrote Bhaskar Chakravorti, dean of global business at The Fletcher School at Tufts University and founding executive director of Fletcher's Institute for Business in the Global Context, in a December 2020 *Harvard Business Review* article.[2] "One roadblock on the path to closing the diversity gap is the extreme geographic

HIGHLIGHTS

62% of survey respondents say their organizations **consider diversity of their technical workforce a priority**.

50% of respondents say their organizations have launched or expanded **programs to increase diversity of their technical staffs** in the last year.

28% have set **specific diversity requirements, goals, or metrics** for their technical workforce.

"I don't believe there is a pipeline problem. I believe there is a myopic view problem," says Bärí A. Williams, a diversity, equity, and inclusion consultant.

concentration of tech companies, which limits the industry's ability to connect with, recruit, and retain talent from a wide dispersed pool." Chakravorti was referring to technology companies in particular, but the argument applies broadly. Organizations of all types tend to look for tech talent in the same tech hotspots and at the same elite universities.

This report looks at the extent to which companies are changing their recruitment, hiring, and retention practices for tech talent. It assesses whether such changes are likely to break down existing barriers to diversity. And it offers tips from diversity, equity, and inclusion (DEI) experts to help executives make good on their diversity promises.

Old Practices Stand in the Way

Organizations need to look at an old problem with fresh eyes, say diversity experts. DEI consultant Bärí A. Williams, for one, is tired of hearing the same old excuses, such as the claim that there is a lack of diverse, qualified candidates in technical fields.

"I don't believe there is a pipeline problem," she says. "I believe there is a myopic view problem." The talent is there, she says, if organizations would broaden their horizons.

Organizations say they want to increase the diversity of their technical staffs, and many have launched new efforts to do so. However, existing ways in which companies recruit may be undercutting diversity efforts.

Over 60% of survey respondents say that their organizations consider diversity a priority, and that they are focusing on DEI more than ever. Many are taking action to increase diversity of technical talent in particular. Half of respondents say their organizations have within the past year launched new or expanded existing initiatives to increase their tech staff's diversity.

While the heightened attention to DEI is a recognition of the need for more equity and inclusion in society, it is also driven by business benefits. When the survey asked the half who reported launching or expanding tech diversity initiatives what their organizations most aim to achieve from them, the top response was improved employee experience (64%) followed by increased innovation (59%). Notably, improved financial performance ranked low (15%), even though research has shown diversity contributes to it.

Most companies recognize that diverse perspectives and backgrounds can lead to new ideas, says Tufts University's Chakravorti. "[DEI] forces us to confront a status quo that may be holding our organizations back while competitors could come in from left field with an innovation we'd never thought of," he says. "Diversity can lead us to expand into new products and new markets."

In addition to ethical reasons, innovation is "absolutely why you want diversity," says Jonathan Kehoe, director of technical recruiting and employer branding at Wayfair LLC, a furniture and home-goods company headquartered in Boston. "You want people who think differently, who can solve problems in better ways and create better outcomes for your business."

And yet, the traditional ways in which organizations find talent, including internal referral programs and university recruiting programs, sometimes reinforce the status quo, say diversity experts.

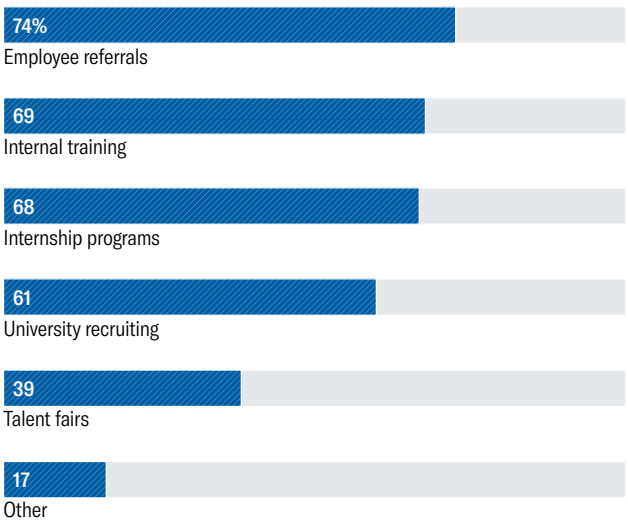
The survey asked executives to identify the programs their organizations use to find technical talent in general, without

FIGURE 1

Typical Ways of Finding Technical Talent

Employee referrals, internal training, and internship programs top the list

What type(s) of program(s) for finding or developing technical talent does your organization have in place?



Source: Harvard Business Review Analytic Services survey, March 2021

"Tech is all about innovation, right? If all your tech employees have been trained by the same faculty at the same schools, you're not going to get much innovation," says Melissa V. Abad, a sociologist at the Stanford VMWare Women's Leadership Innovation Lab.

mentioning diversity. Seventy-two percent of respondents say they currently have programs in place. The most common of those programs are employee referrals (74%), internal training (69%), internships (68%), and university recruiting (61%). **FIGURE 1**

It's Who You Know

These frequently used recruiting programs may inhibit diversity because they typically depend on existing cultures and draw from current networks within an organization. Such dependence can perpetuate inequities, according to DEI experts.

Take employee referral programs, for example. "If you look at who already makes up the bulk [of employees] at these companies, what are the odds that they are going to [refer] a Black woman engineer?" asks Williams, who in addition to working as a DEI consultant is chief operating officer (COO) of Bandwagon Fan Club Inc., a data and identity analytics tech company focused on sports and entertainment, based in Greenville, S.C., and author of *Diversity in the Workplace: Eye-Opening Interviews to Jumpstart Conversations about Identity, Privilege, and Bias.* "If you don't know [Black women engineers], and you aren't actively trying to know them, then you won't recommend them." The same argument could apply to internal training, the second most-common recruiting method; unless such programs specifically target underrepresented groups, it's likely they won't increase diversity.

Similarly, companies often recruit tech talent from the same schools, such as Stanford, MIT, and Harvard, which determines who is offered internships as well as permanent jobs. "Given the demographics of those schools, they are already at a loss because there are not a lot of Black, Latinx, or even women engineering or computer science students at those schools," says Williams.

These practices may not only impede efforts to diversify in terms of race, gender, and socioeconomic group, but also diversity of thought. Graduates of the same school may have the same experiences and perspectives, explains Melissa V. Abad, a sociologist at the Stanford VMWare Women's Leadership Innovation Lab. "Tech is all about innovation, right? If all your tech employees have been trained by the same faculty at the same schools, you're not going to get much innovation. You want people with different experiences, from different walks of life."

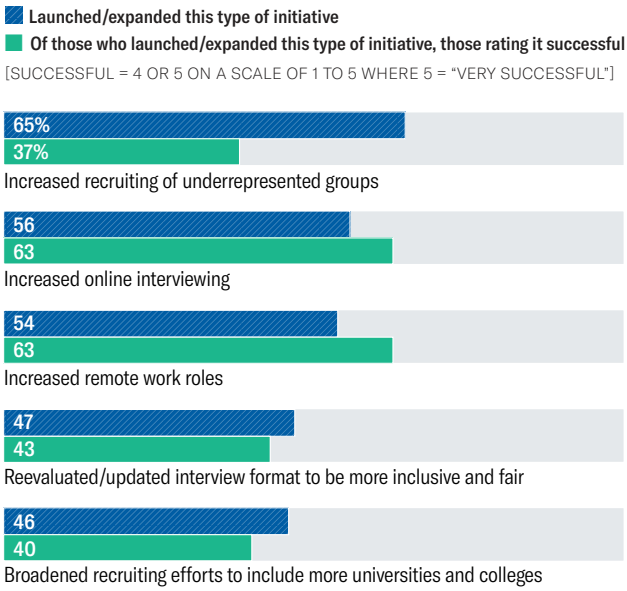
Remote Work May Increase Access

Organizations seem to view the shift to remote hiring and remote work as an opportunity to increase diversity, just as Chakravorti suggests. Of the 50% of survey respondents who reported recent new or expanded initiatives to increase their tech staff's diversity, the most frequently named strategy was increased recruiting aimed at underrepresented groups (65%). **FIGURE 2** The second and third most common choices involve the shift to remote work caused by the pandemic: increased online interviewing (56%) and increased remote work roles

FIGURE 2

Organizations Use Distance to Diversify

Respondents indicate the shift to remote work is helping increase diversity



Source: Harvard Business Review Analytic Services survey, March 2021

Organizations include terms like "aggressive" or "coding ninja" in job postings, and research suggests that female candidates are less likely to apply to jobs that use those words, says Jonathan Kehoe, director of technical recruiting and employer branding at Wayfair.

(54%), both of which enable organizations to recruit from a wider variety of locations/geographies. Notably, when asking respondents how successful each of the different programs they've adopted have been, the highest ratings of success are given to these two programs.

Although respondents report that their programs involving increased online interviewing and remote work roles are successful, that judgment seems premature. These programs are, as defined in the survey, less than a year old. Chakravorti hopes eventually to see hard data as evidence of success but expects incremental improvements over time rather than a sudden sea change.

There is some anecdotal evidence of such efforts, however. *The Wall Street Journal* reported in March 2021 that several tech companies were expanding in Atlanta to hire Black tech talent. The article noted that these programs targeted Atlanta because it had diverse technical candidates that might not be willing to uproot themselves from family ties and a familiar culture to move to a tech hotspot like Silicon Valley.

Culture and community can be important considerations for people in underrepresented groups. "If you're living in Menlo Park or San Francisco, it can be hard to find your community," Williams says. "If you're not finding community at work, and you're not finding it outside of work, you're not going to want to stay."

Abad, who moved from her hometown of Chicago to work at Stanford, experienced this disconnect firsthand. There are a lot of differences, ranging from trying to find someone to cut her hair to learning how to use freeways rather than public transit to get around. "Some of the differences may seem minor, but learning how to navigate the freeway in the Bay area—and getting used to sitting in traffic for hours—is a huge adjustment."

The Pros and Cons of Near and Far

Companies are also reviewing interview methods, and—in many cases in response to the shift to remote work—online interviewing. Interviewing is particularly prone to unconscious bias and unintentional exclusion, and so gets special attention as companies try to hire more diverse talent. Some 47% of respondents in the group with new or expanded programs to increase tech diversity said they were reevaluating and updating interview formats.

Complicating the interview process is the subjective judgment of whether a candidate is a good "fit" for an organization. It could be argued that such a "fitness" assessment works directly against diversity. Fitness means you are like others, while diversity means you are not.

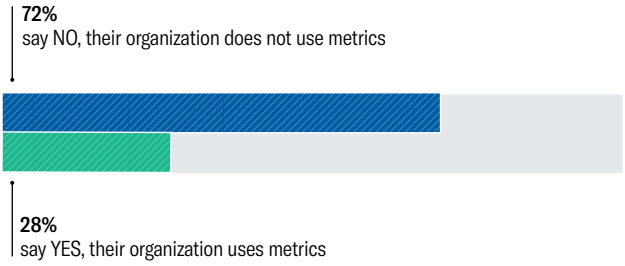
Wayfair has started using natural language processing to ferret out bias in written performance reviews, says Kehoe. "There are all sorts of words that can indicate some type of bias," he explains. Wayfair also uses technology to remove gendered words from job descriptions. For instance, organizations sometimes include terms like "aggressive" or "coding ninja" in job postings, and research suggests that female candidates are less likely to apply to jobs that use those words, Kehoe notes. In addition, Wayfair uses technology to screen some job applicants purely objectively, such as using an automated questionnaire for warehouse jobs. The assessment of candidates strictly on the basis of their answers can eliminate human bias, he says.

The shift to remote interviewing has both advantages and disadvantages, Kehoe further explains. It can be easier to schedule, but a virtual interview also makes it difficult to pick up on subtle body language that may indicate someone is uncomfortable and needs to take a break, for example. What's more, if a candidate can't come for an in-person interview, "you don't have the chance to showcase certain things about

FIGURE 3

You Can't Manage What You Don't Measure

Few organizations use diversity metrics, raising the issue of what constitutes hiring success



Source: Harvard Business Review Analytic Services survey, March 2021

"For an industry that is so heavily tied to data, if you don't have any metrics, you don't have any accountability. I don't want to hear them talk. I want to see them walk," says Williams, the DEI consultant and author.

your company," he says. "When a candidate [physically] interviews at a company they get to walk around, they can feel the environment, and they can see whether there are people like them working there."

Missing Metrics, Absent Accountability

Despite organizations' attempts to increase diversity, metrics and accountability are conspicuously missing. This lack of measurement and assigned responsibility sows skepticism about companies that claim to be making progress. "For an industry that is so heavily tied to data, if you don't have any metrics, you don't have any accountability," says Williams. "I don't want to hear them talk. I want to see them walk."

Only 28% of respondents say their organization has set specific diversity requirements, goals, or metrics for its technical workforce. The majority (72%) have no such measures. **FIGURE 3** Not surprisingly, those reporting that diversity of their technical staff has improved are more likely to have set diversity requirements, goals, or metrics (35%) compared with those reporting stagnant or worsened diversity (19%). Of the 28% overall that say they have defined requirements, goals, or metrics, less than a quarter track and publicly report these metrics.

But metrics can become quite complicated, quite quickly. A multilayered cause of this complexity is intersectionality, a term coined by Kimberlé Crenshaw, professor at Columbia Law School and distinguished professor at UCLA School of Law, to describe how race, class, gender, and other individual identities overlap, shaping experiences and exacerbating inequalities.[3] These intersections can create complex structural barriers within an organization, says Abad. "A lot of companies don't collect data at these intersections," she says. "They'll have gender differences, and they'll have racial differences, for example, but they don't include the nuance of looking at them together to identify barriers to retaining the diverse populations they've just hired." That lack of nuance can mean that an organization may see that more women are being promoted yet be unaware that they are all white and cisgender, for example.

When she talks to tech leaders about their diversity challenges, one of the first things Abad requests is data on employees. "If they're not collecting data at the intersection of race, gender, and everything else, then I don't know how to help them," she says. "They need to collect data at the intersections and identify patterns of retention, promotion, and stagnation before designing diversity initiatives."

Chakravorti says organizations should also look at job categories and seniority levels. How many Latinx employees are in revenue-generating functions? How many are client-facing? How many are entry-level warehouse workers? "You need that level of granularity," he says, in order to get a full picture of diversity, or lack thereof, in an organization.

The lack of measurement at many organizations may depend on who is accountable. Asked who is ultimately responsible for tech staff diversity, responses are all over the organizational map. **FIGURE 4** The top answer is the CEO (23%), but historically diversity has not been a high priority for CEOs, the majority of whom are white and male.[4] The second-ranked answer is "no one." Several respondents offered comments to the effect that "we are all responsible," which calls to mind the old saying that "if everyone is responsible, then no one is responsible." Other responses include head of human resources (16%), technical manager specifically responsible for hiring technical staff (11%), HR talent manager specifically responsible for hiring technical staff (8%), and chief technology officer (8%). Notably, the chief diversity officer tied in last place with "don't know," both at 5%.

Chakravorti says a C-suite executive should have this responsibility. It should not be in human resources. "HR is given limited resources and has quotas to fill, so they do things as efficiently as possible," which often means using the same tried and true sources, he says.

The half of survey respondents that say their organizations have not launched or expanded programs to increase tech diversity over the past year indicate that this absence may be due to a lack of accountability. Asked what factors have prevented them from launching initiatives, the top response is no person or office is held accountable for diversity (34%), followed by organization is satisfied with current level of diversity (30%), and lack of commitment from leadership (23%).

On the other hand, a diffusion of responsibility does not necessarily indicate abdication of responsibility. Kehoe points out that it is challenging to strike a balance among shared responsibility for diversity as a cultural value throughout the company, responsibility for diversity from an HR point

FIGURE 4

Whose Job Is It, Anyway?

Responses indicate variety across organizations when it comes to who is ultimately responsible for diversity of the tech staff.

Who at your organization is ultimately responsible for the diversity of technical staff?

Source: Harvard Business Review Analytic Services survey, March 2021

of view, and responsibility for diversity from the technical or business manager point of view. "At Wayfair, we say it's everyone's responsibility," Kehoe says. "However, HR and talent acquisition partner on certain specific initiatives, and those have owners and specific goals. So, if you own an initiative, then it's your job to get it done."

Tips for Lasting DEI Change

Even when organizations successfully hire more diverse technical employees, they often fail to retain them because of structural barriers that keep employees from feeling like part of the community, or that hold them back from deserved promotions or increased compensation. A company may increase its proportion of Black engineers from 3% to 6% one year, but then half leave the next year and it's back down to 3%. The door just continues to revolve. "I don't think companies pay attention to that piece of the challenge," Abad says.

Companies tend to bemoan poor retention without examining the factors that lead to it, notes Lori Nishiura Mackenzie, a cofounder of Stanford VMware Women's Leadership Innovation Lab and lead strategist of diversity, equity, and inclusion at the Stanford Graduate School of Business. "We asked hundreds of managers at one tech company what it took to get promoted, and they said it was visibility, it was building up their reputation," she says. But it takes certain opportunities and a certain network to build that visibility, and people can be siloed into distinct tracks based on their gender, race, or other factors, cutting them off from opportunities. Then, they quit. "It seems like it's that moment—the employee's decision to leave—that companies focus on, but it's everything leading up to it that has created the disadvantages," she says.

To disrupt these structural barriers and avoid issues that can derail diversity efforts, experts offer these tips:

Branch out. Avoid the use of internal referrals and personal networks, at least in some cases, and see what happens. When a company can't use typical channels, it is forced to look for new ones.

Hire mid-level managers. Entry-level employees, typically in their early to mid-20s, are unlikely to stay for long because most haven't settled on a definite career path. Older, seasoned managers are not only more stable but also bring their own personal and professional networks, which can expand the organization's access to highly qualified, diverse candidates. This approach is a way to use personal networks in a more positive way. "People build relationships with who they know," says Abad. Seasoned managers also typically have experience with team processes and execution that can improve diversity.

Be careful in asking employees to help. Don't take unfair advantage of employee resource groups (ERGs). Sometimes companies rely on these groups of people who share a particular identity, such as LGBTQ, to identify and recruit diverse candidates, according to Mackenzie and Abad. Rather than expecting these employees to take on extra work, usually for no pay, Mackenzie suggests creating stretch assignments around ERGs. An employee who successfully engages hundreds of employees in diversity work, for example, could not only expand his or her leadership skills, but the company could, in turn, recognize and reward that growth. "That way ERGs leadership could be a career accelerator rather than a career drainer," she says.

A multilayered cause of complexity is intersectionality, which describes how race, class, gender, and other individual identities overlap, shaping experiences and exacerbating inequalities.

Organizations need to question their basic assumptions about diversity, including an attitude that sometimes lay hidden within the complex matrix of structural barriers: that they aren't hiring diverse candidates because such candidates aren't qualified.

Broaden your perspective on training and education. Chakravorti says organizations need to use new models of education and training. The traditional approach of hiring graduates, who then develop and build careers along predictable paths, is outdated. Instead, organizations could use a "just in time" approach, educating and training people at various points in their lives. This more flexible approach can open the door to more diverse hiring, he notes.

Try using blind auditions. Some employers have tried blind auditions, where a candidate is given a technical challenge to solve and the interview panel does not know that person's gender, race, age, education level, or socioeconomic status, says Mackenzie. A higher percentage of people of color, self-educated people, community college graduates, and women pass this bar than in the more traditional process, she says. However, it is often used "differentially," which reinstitutes barriers. "For example, some companies thought that people from elite universities shouldn't need to take the technical challenge," she explains. "So if it's only applied to graduates of universities ranked outside the top 10, who may actually be more talented, for example, that's not equitable."

Don't fall for the "faux meritocracy." That's what Williams calls the attitude of considering only candidates from certain schools. "I know people who turned down Harvard to go to Morehouse College," an HBCU in Atlanta. And even within HBCUs, look beyond those with the highest profiles. "Just because you don't know about something, it doesn't mean that it isn't good," she says. "It just means that you don't know what you don't know."

Conclusion

Increasing the diversity of the technical workforce will likely continue to be a complex challenge. The shift to remote work may help, and the Harvard Business Review Analytic Services survey results indicate that companies are trying. But long-term results are not yet there.

In the meantime, organizations would do well to look within, not just reach out. They can examine existing recruiting and hiring practices to make sure these are not creating or perpetuating barriers. They can investigate to what extent their current structures and processes limit diversity. And they can hold managers and executives accountable for the overall diversity of technical staff.

In short, organizations need to question their basic assumptions about diversity, including an attitude that sometimes lay hidden within the complex matrix of structural barriers: that they aren't hiring diverse candidates because such candidates aren't qualified. "It's not about lowering the bar," says Williams. "It's about widening the pool."

Endnotes

1 U.S. Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey," January 22, 2021. https://www.bls.gov/cps/cpsaat11.htm.

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METHODOLOGY AND PARTICIPANT PROFILE

A total of 309 respondents drawn from the HBR audience of readers (magazine/ enewsletter readers, customers, HBR.org users) completed the survey.

Size of Organization

19%
10,000 or more employees

12%
1,000–9,999 employees

8%
500–999 employees

25%
100–499 employees

26%
Fewer than 100 employees

Seniority

33%
Executive management/ board members

37%
Senior management

14%
Middle management

17%
Other grades

Key Industry Sectors

43%
Technology

8%
Consulting services

All other sectors less than 8% each

Job Function

30%
General/ executive management

15%
HR/training

All other functions less than 8% each

Regions

56%
North America

21%
Europe

14%
Asia/Pacific/Oceania

4%
Latin America

4%
Middle East/Africa

Figures may not add up to 100% due to rounding.

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