Closing the tech gender gap through philanthropy and corporate social responsibility

The US tech sector isn't doing enough to build pathways into tech for women—particularly women of color. What is behind this gender gap, and what can tech companies do about it?

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It is hardly news that women—particularly women of color—are chronically underrepresented in the US tech sector. Perhaps more alarming is that the trend is headed in the wrong direction. The percentage of computing roles women hold has largely declined in the United States over the past 25 years.

The situation is even more grave for under-represented women of color: black, Latina, and Native American women.

To help more women prepare for careers in the tech industry, McKinsey collaborated with Pivotal Ventures, an investment and incubation company created by Melinda Gates, on a comprehensive study to examine how tech-company philanthropy and corporate social responsibility (CSR) investments can improve the gender diversity of the tech pipeline. This report, *Rebooting representation: Using CSR and philanthropy to close the gender gap in tech,* offers a detailed analysis of the current state of the tech sector's gender gap, as well as practical guidance for tech companies interested in increasing the diversity of the tech pipeline.

A lack of gender diversity carries with it a major opportunity cost, both for individual tech companies and the entire sector. Diverse teams, including those with greater gender diversity, are on average more creative, innovative, and, ultimately, are associated with greater profitability. This strong positive correlation between higher levels of employee diversity and stronger financial performance has been demonstrated consistently across sectors and geographies, and tech is no different. Plus, tech companies' recent public struggles on gender-related issues have demonstrated there are real, immediate costs that result from a lack of inclusion and diversity—lost stock value, lower market share, HR costs, and public relations costs, among others.

There is no question that the tech sector can help create a brighter future for women and girls in computing. Through a survey of 32 leading tech companies representing nearly $500 billion in revenues and slightly more than $500 million in philanthropic giving in 2017, as well as extensive interviews with approximately 40 tech-company leaders, we found evidence of why, exactly, current philanthropic and CSR efforts are falling short. Tech company action today will create opportunities for women to lead innovation tomorrow.
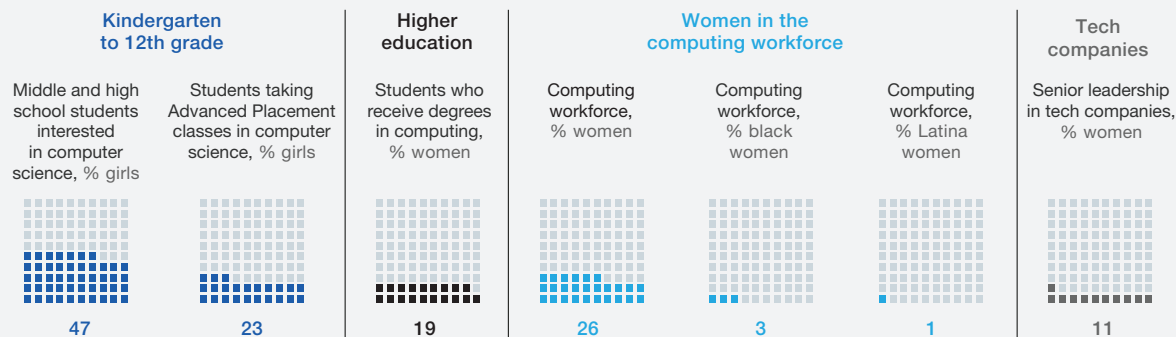
Women in computing today

The lack of diversity in the US tech sector is not a recent phenomenon; it has been a significant and consistent challenge for tech companies for many years. From tech start-ups to Fortune 500 industry anchors, tech companies of all sizes recognize that their workforce continues to draw mainly from a small segment of the talent pool—predominantly white and Asian men from elite educational institutions. Drawing from a narrow talent pool leaves money, innovative ideas, and star employees on the table—and potentially exposes organizations to criticism and reputational risk.

To understand the magnitude of the problem, consider the fact that women comprise just 23 percent of high school Advanced Placement computer-science exam takers, 19 percent of bachelor's computer and information science degree recipients, and 26 percent of the computing workforce (Exhibit 1). The situation is worse for underrepresented women of color: despite accounting for approximately 16 percent of the general population , women of color comprise only around 4 percent of technical roles in tech companies and are almost completely absent at the senior leadership level, with zero black or Latina women CEOs of Fortune 500 tech companies. While men of color are also excluded from tech, they participate at almost three times the rate of women of color.

And things are getting worse, not better: the share of black, Latina, and Native American women receiving computing degrees has dropped by 40 percent

Exhibit 1 Girls and women are underrepresented across the board in computing.

Kindergarten to 12th grade		Higher education	Women in the computing workforce			Tech companies
Middle and high school students interested in computer science, % girls	Students taking Advanced Placement classes in computer science, % girls	Students who receive degrees in computing, % women	Computing workforce, % women	Computing workforce, % black women	Computing workforce, % Latina women	Senior leadership in tech companies, % women
47	23	19	26	3	1	11

McKinsey&Company | Source: *Rebooting representation: Using CSR and philanthropy to close the gender gap in tech*

over the past decade, to 4 percent, from 7 percent (Exhibit 2). If this trend continues, the number of underrepresented women of color receiving computing degrees will not double over today's numbers until 2052—by which time they will represent a vanishingly small proportion of all graduates.

The tech sector needs to innovate to expand its technical workforce—and quickly. According to a recent McKinsey Global Institute discussion paper, demand for advanced IT and programming skills will grow by as much as 90 percent over the next 15 years. Business leaders across sectors are already reporting an expected tech skills shortage in their companies within the next three years. And the competition for technical talent is about to become much fiercer across industries as companies of

all types grow their technical capabilities. To stay ahead, the tech sector needs to expand its talent pool rapidly by investing in and attracting historically underutilized talent, notably women.
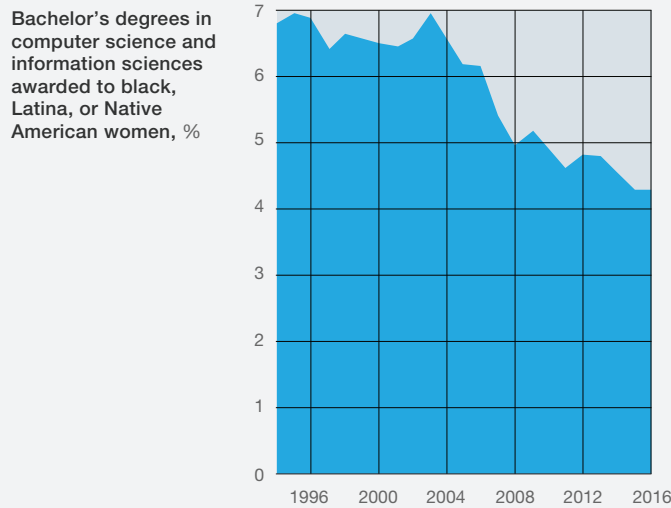
Current philanthropic and CSR efforts to increase the gender diversity of the tech sector are falling short

Despite the growing number of voices pushing for gender equality across the United States, and many tech companies stating that diversity is a priority, we are not yet seeing concrete gains in the tech industry. If tech companies can successfully create pathways for women and girls—particularly the most marginalized women and girls of color, who face the greatest number of barriers—to pursue careers in technology, the industry will benefit from a much broader talent pool and realize new economic opportunities.

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Black, Latina, and Native American women are a low and declining percentage of computing degree recipients.

Bachelor's degrees in computer science and information sciences awarded to black, Latina, or Native American women, %

1996   2000   2004   2008   2012   2016

Source: National Center for Education Statistics Integrated Postsecondary Education Data System

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To ensure these efforts are successful, it is important for tech companies to begin with an understanding of why their current efforts are falling short. Our survey revealed several insights into the current state of philanthropic and CSR efforts.

Many companies do not apply a gender lens to their CSR and philanthropy. Despite many leaders' stated desire to bring more women into the sector, most companies do not invest significantly in improving the gender diversity in tech through their philanthropy. In 2017, only around 5 percent ($26 million) of companies' philanthropic giving went to programs with an explicit focus on women and girls in tech. Without deliberately focusing on women's representation in programs that prepare people for careers in tech, companies risk replicating the same gender ratios we see in the sector today.

Underrepresented women and girls of color fall through the cracks. Although companies express a strong desire to reach underrepresented women of color, less than 0.1 percent (or $335,000) of the 32 tech companies' 2017 philanthropic giving focused on reaching them specifically. Many companies sponsor programs to reach underrepresented minority communities generally rather than doubling down on removing barriers for women of color in particular. This current gender-neutral approach is unlikely to change the persistently low number of underrepresented women of color in tech.

Current investments focus on middle and high school students, though later on-ramps are effective at involving more women and girls. Tech companies concentrate 66 percent of their philanthropic funding on K–12 programs, compared

to 3 percent on college-level programs (Exhibit 3). Although many invest in recruiting efforts in late college, few invest philanthropically earlier in higher education to build the cohort from which they will ultimately recruit, pointing to a missed chance for tech companies to influence the pipeline in the short term.
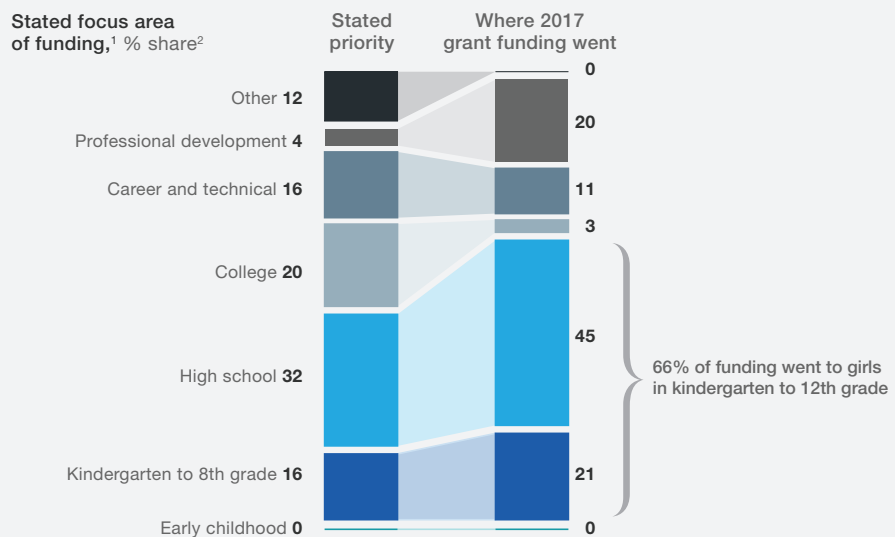
Decision making and ownership regarding gender-diversity initiatives are fragmented within tech companies. Tech companies reported that their various groups and functions involved in gender diversity—for example, HR, diversity and inclusion (D&I), and CSR—rarely coordinate on strategy, with no clear "owner" overseeing the company's approach to increasing the number of women in technology overall. Companies that successfully link their philanthropy and CSR efforts

with their D&I initiatives under a unified strategy are more likely to see success on both fronts.

Companies struggle to navigate through the limited evidence of what works. Sixty-one percent of companies reported that it is difficult to know which programs have the most impact today, and 42 percent resort to self-guided online research to drive their giving strategy. The need for more research, as well as the synthesis and dissemination of findings, is clear.

Best practices to increase tech gender diversity through philanthropic and CSR investments

Our research distills evidence from across the field to identify the approaches showing the most promising results in increasing the number of women studying computing and entering tech. A few

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Exhibit 3   Current philanthropic funding for women in tech primarily goes toward K-12 efforts and professional development.

Stated focus area of funding,[1] % share[2]	Stated priority	Where 2017 grant funding went	
Other **12**			0
Professional development **4**			20
Career and technical **16**			11
College **20**			3
High school **32**			45
Kindergarten to 8th grade **16**			21
Early childhood **0**			0

66% of funding went to girls in kindergarten to 12th grade

[1]Percentage of companies that selected focus area as their top priority for grant dollars compared with actual grant dollars awarded.
[2]Companies surveyed n = 32.

McKinsey&Company | **Source:** *Rebooting representation: Using CSR and philanthropy to close the gender gap in tech*

The evidence base points to eight components that programs need to incorporate to empower women and girls to succeed in tech.

critical best practices emerged from this research. Tech companies can draw on them in the design of their own programs and when engaging with organizations they fund or partner with.

Focus on women and girls

As part of a broader diversity effort, it is important for companies to support either girls-only programs or coeducational programs that focus on achieving at least 40 percent representation of girls through proactive recruitment and retention steps. Maintaining a focus on women's equal representation, with stated goals at the program level, is the only way to avoid replicating the same gender ratios we see in tech today.

Solve for those facing the most barriers— underrepresented women and girls of color

Women experience different types of roadblocks and biases when studying computing and pursuing a career in tech due to their race or ethnicity, socioeconomic status, sexuality, and other elements of their identities and backgrounds. Companies can support strategies and programs that attend to the specific challenges faced by the subsegments of women who are facing multiple forms of marginalization. Focusing on the experiences of those who face the greatest number of barriers will spur solutions that ultimately improve the inclusivity of the tech sector for all underrepresented groups.

It is never too late; consider multiple on-ramps

Girls and women can begin their journey into tech at many different points in their lives. According to our research, because girls are less likely than boys to have exposure to computing as children, later on-ramps—such as those during higher education— offer high-impact opportunities to make up lost ground by involving women and girls who have minimal previous exposure.

Deliver eight critical building blocks for success

The evidence base points to eight components that programs need to incorporate to empower women and girls to succeed in tech. Tech companies should work with their partners to ensure these success factors are in place to maximize the impact of their investments:

1. Offer on-ramps for beginners.
2. Create a sense of belonging.
3. Build her confidence in her abilities.
4. Cultivate a community of supportive peers.
5. Ensure adult gatekeepers (family, teachers, counselors) are encouraging and inclusive.
6. Foster interest in computing careers.
7. Create continuity between computing experiences.
8. Provide access to technology and computing experiences.

Connect programs to each other

Most programs only target one particular stage in the tech journey. However, if the experience of women and girls in tech are one-off, they are less likely to remain engaged in computing. Companies can encourage the programs they support to connect with one another and transition young women smoothly from one experience to the next— and invest to fill any gaps in program offerings.

Developing this "connective tissue" increases the likelihood that the experiences in which a company invests will ultimately lead women to enter the sector.

Measure impact

Companies can drive knowledge development by funding organizations and grantees to collect data against a consistent set of metrics. This report contains a dashboard that captures the relevant metrics for companies to apply across their CSR and philanthropic programs related to women in tech; the intention is to help the field coalesce around a manageable set of indicators that will enable us to understand what works.

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Together, tech companies have the opportunity to dramatically shift the trajectory of women and girls entering the industry and make tech an exciting career opportunity for all. Getting this right will result in women participating in the tech workforce in equal numbers as men. Achieving greater equality is a business imperative for the sector—and the benefits will spread far beyond it. ■