



# Women in the tech industry: Gaining ground, but facing new headwinds

Technology companies should renew their commitment to advancing gender diversity in tech as the pandemic recedes

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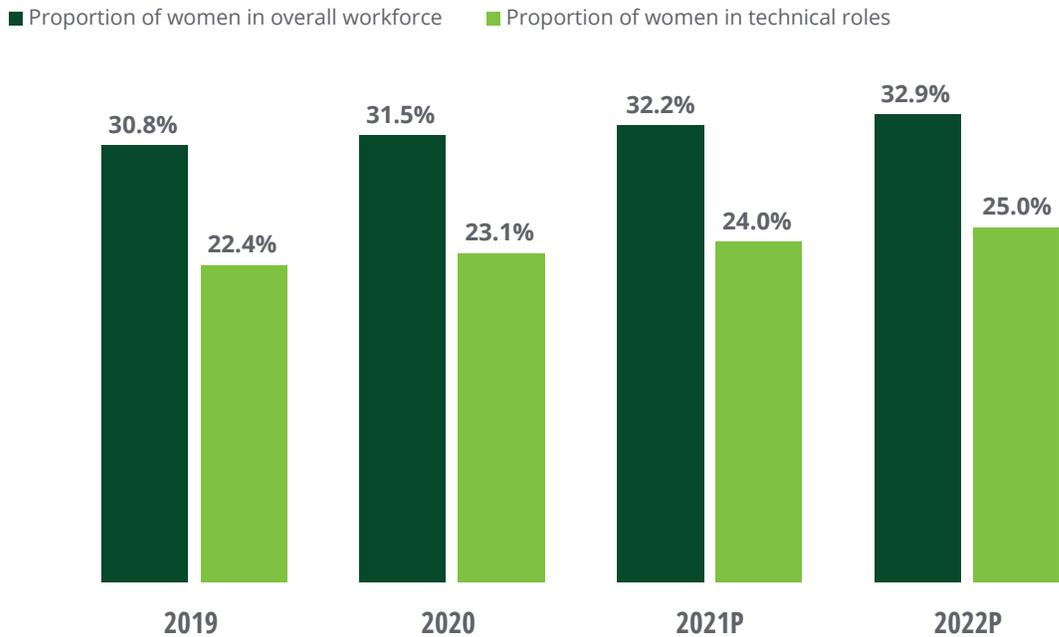
**T**HE TECHNOLOGY INDUSTRY—or at least its largest players—will likely continue to close the gender gap in the year ahead. Deloitte Global predicts that large global technology firms, on average, will reach nearly 33% overall female representation in their workforces in 2022, up slightly more than 2 percentage points from 2019 (figure 1).<sup>1</sup> The proportion of women in technical roles will also nudge up, though it has tended to lag the overall proportion of women by about 8 percentage points.

A 2-percentage-point increase, though small, actually represents notable progress. Moving the needle is difficult, and even aggressive campaigns to recruit, hire, retain, and promote women have been found to work slowly. But while this progress is a step in the right direction, going forward, tech companies may need to work even harder to improve these numbers.

FIGURE 1

## Large technology companies are making slow but steady progress in increasing female workforce representation

Female workforce representation in large technology companies



Source: Analysis and 2021 and 2022 predictions based on published diversity reports from 20 large technology companies (with an average workforce of more than 100,000 employees).

### Large tech companies are making progress, but they may be at risk of stalling

With research showing that diverse teams perform better and are more innovative, leaders across industries recognize that a diverse workforce—by gender, race, age, and other social factors—is good for business.<sup>2</sup> As the tech industry seeks to shape a prosperous future for themselves, it is aiming to be more representative of that future.

Our analysis of 20 large technology companies that provide annual workforce diversity reports shows that they have maintained their momentum on the gender front in the past two years.<sup>3</sup> Despite women being disproportionately affected by pandemic-driven spikes in global unemployment and

reductions in labor force participation,<sup>4</sup> many of these organizations have managed to keep female representation on an upward trajectory. In part, this may have been because the technology sector was better prepared than most to pivot quickly to remote work and flexible work models when the pandemic began, relying on already familiar connectivity and collaboration tools. Moreover, many large enterprises have had workforce diversity pledges and programs in place for several years, and this prior commitment to diversity (gender and otherwise) may have helped them weather the crisis. Further, employment in the tech sector, including for women, began to recover earlier than many other industries, possibly making it easier to maintain progress in gender equity.<sup>5</sup>

While high-profile tech players will likely continue to make and report gains in gender diversity, smaller tech companies with fewer resources and less stature to attract and keep women may find it harder.<sup>6</sup> It's difficult to pinpoint how these smaller companies are faring, since they don't typically report diversity data, but a late 2019 study of global tech startup executives found that only 43% had established companywide hiring and promotion goals to increase diversity.<sup>7</sup> Without targets and transparency, smaller tech organizations may well be underperforming on gender diversity compared to their larger peers—and they may have fallen even further behind during the pandemic.<sup>8</sup>

Continued progress will likely require renewed commitment and greater effort. Well-known challenges to equitable female representation persist, including factors related to the educational pipeline, recruitment and hiring, retention, pay, and promotion.<sup>9</sup> Adding to these challenges, the COVID-19 pandemic has taken a heavy toll on workers' well-being and professional prospects. Deloitte's 2021 *Women @ Work* study, which polled 500 women in the global technology, media, and telecommunications (TMT) workforce, found that, compared with how they felt prior to the crisis, TMT women have experienced dramatic drops in motivation and productivity at work, job satisfaction, work/life balance, and feelings of loyalty to their employers (figure 2).<sup>10</sup> Eighty-three percent of the TMT women surveyed reported that their workload had increased, and a majority said that they were spending more time on household chores and dependent care as well.<sup>11</sup> Boundaries between life and work collapsed: Satisfaction with work/life balance dropped by 38 points, and the ability to "switch off" work dropped by 19 points. Perhaps more alarmingly, only 38% of women in the TMT industry feel their organization's commitment to supporting them has been sufficient.<sup>12</sup> Just 30% say their employer increased their access to flexible work (such as the freedom

to work around caregiving responsibilities or other commitments), and only 22% say that their employers made it clear they're not expected to be "always on."<sup>13</sup>

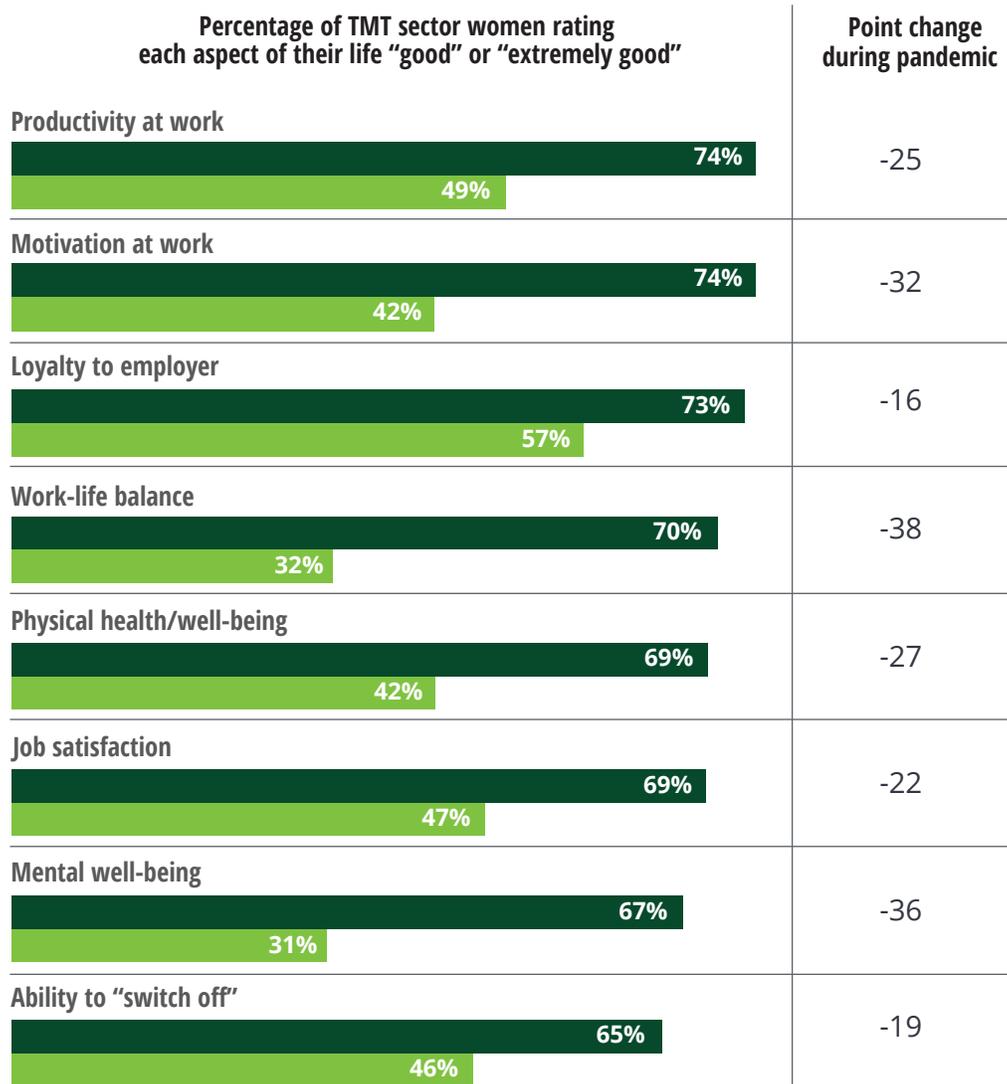
## Well-known challenges to equitable female representation persist, including factors related to the educational pipeline, recruitment and hiring, retention, pay, and promotion.

Racially and ethnically diverse TMT women appear to be even more negatively affected by the pandemic than their peers. Compared to other women working in TMT, they are more likely to report spending increased time on work and home responsibilities. They're more likely to report poor or extremely poor satisfaction with their mental and physical well-being, as well as their motivation and productivity at work and ability to switch off. Startlingly, over half of racially and ethnically diverse TMT women (52%) rate their work/life balance as poor or extremely poor versus 43% of other TMT women, and 59% feel less optimistic about their career prospects today than before the pandemic versus 48% of other TMT women. Since few tech companies report in detail on the composition of their female workforces (that is, race, age, or other social identities), it's difficult to gauge if representation is improving in other dimensions, but it's plausible that the pandemic's differential impacts on racially and ethnically diverse women may be complicating diversity efforts.

FIGURE 2

**During the pandemic, women in the TMT sector became much less satisfied with many aspects of their life and work**

■ Before pandemic ■ Today



Source: Analysis of TMT sector respondent data from Deloitte's *Women @ Work* global study, 2021.

Note: The survey polled 500 women in the TMT workforce across 10 countries between November 2020 and March 2021.

These pandemic-driven pressures may result in job churn among women and may even prompt some to leave the workforce entirely. A majority of TMT women (51%) feel less optimistic about their career prospects now than before the crisis broke, and 57% expect to leave their current employer for a

new role within two years, citing lack of work/life balance as the biggest reason. What's more, a startling 22% are considering leaving the workforce altogether, motivated chiefly by workload increases that are affecting their well-being.

But these are factors organizations can mitigate. Some tech companies, including Google, Salesforce, and IBM, have responded to the pandemic by expanding programs for backup child care and paid family caregiver leave.<sup>14</sup> Some have created new flexible-work and well-being programs, such as job sharing, free mental health counseling, collective

disconnect days, and video programs with child-focused educational content.<sup>15</sup> Tech companies that proactively craft programs and policies to help workers balance their caregiving and well-being needs with work responsibilities may be able to avoid burnout, build greater loyalty, and retain diverse talent through the crisis and beyond.

## THE BOTTOM LINE

Looking past the pandemic, organizations should consider how their future work model could help them reach a wider and more diverse talent pool. Drawing on lessons learned during the pandemic, several major tech companies are embracing a remote-first work model, while others are settling on a hybrid of office- and home-based work, and some are even experimenting with smaller distributed offices.<sup>16</sup> Beyond increasing work/life flexibility, “work from anywhere” models expand the available pool of exceptional, diverse talent to nationwide and even worldwide, not just within commuting distance of the office.<sup>17</sup>

Having a larger talent pool to choose from can be especially important for an industry that doesn't have enough qualified women to go around. Building up the next generation of tech talent by diversifying the STEM pipeline is a laudable goal, but one that will likely take many years of sustained effort. In the meantime, some tech companies are aiming to attract and recruit women from overlooked worker segments such as those returning to work or transitioning from other industries. Some are partnering with organizations that run “returnship” programs, providing training and mentorship to women resuming their careers after a pause.<sup>18</sup> Others have established apprenticeships that aim to recruit and upskill “unconventional talent” such as career-switchers who lack a traditional tech background.

Beyond hiring more women, closing the gender gap will likely require solving challenges of retention and equitable promotion. Research indicates that about half of the industry's female workers drop out of technology employment by mid-career, and women hold less than a quarter of the industry's senior leadership roles.<sup>19</sup> According to a 2020 Deloitte report, gender bias is the top obstacle preventing tech women from moving into leadership positions.<sup>20</sup> Yet diverse leadership can be critical for enabling more creative thinking and better business outcomes, as well as for providing role models.<sup>21</sup> Formal mentorship programs and development opportunities for women, along with gender targets for promotions, could go a long way toward improving retention among women and enabling them to progress to senior executive levels. But less than a quarter of TMT companies have established these measures, according to Deloitte's *Women @ Work* research.<sup>22</sup>

When all is said and done, improving women's representation in technology calls for the same kind of leadership commitment and strategic focus that underlies other critical organizational initiatives. Companies should identify a responsible executive and commit to a holistic diversity, equity, and inclusion strategy that cultivates an inclusive culture. Accountability and transparency—identifying metrics, reporting results, and tracking progress—are essential. Only then can companies take stock of what is and isn't working, revise their approach, and improve.

## Endnotes

1. Deloitte conducted analysis and projections using data from the diversity reports published by 20 large global technology companies, covering their diversity data through 2020.
2. David Rock and Heidi Grant, "Why diverse teams are smarter," *Harvard Business Review*, November 4, 2016; Stuart R. Levine, "Diversity confirmed to boost innovation and financial results," *Forbes*, January 15, 2020; Jennifer Riel, "Tolerance is for cowards," *Quartz*, October 27, 2017. While we're focused on gender diversity in this article, in 2019, several large tech companies renewed their commitments to racial diversity; see: Lauren Feiner, "Tech companies made big pledges to fight racism last year—here's how they're doing so far," CNBC, June 6, 2021.
3. Although not every large global tech company publishes these reports, almost all the largest players do, and we believe that the data is therefore a good proxy for large tech companies in general.
4. Rakesh Kochhar and Jesse Bennett, "U.S. labor market inches back from the COVID-19 shock, but recovery is far from complete," Pew Research Center, April 14, 2021; Courtney Connley, "Unemployment rate understates what's going on, expert says, as millions of women remain out of workforce," CNBC, March 5, 2021; International Labour Organization, "Slow jobs recovery and increased inequality risk long-term COVID-19 scarring," June 2, 2021; Karen Gilchrist, "Covid-19 has destroyed 22 million jobs in advanced countries, says OECD," CNBC, July 7, 2021.
5. In the United States, the technology sector has already gained back many of its pandemic job losses. See: Galen Gruman, "US IT job growth jumps in August; 2021 on track for record hiring levels," *Computerworld*, September 7, 2021; CompTIA, *CompTIA tech jobs report*, accessed October 5, 2021.
6. Our analysis of data from Deloitte's *Women @ Work* survey revealed that women working at smaller TMT firms (US\$250 million to US\$500 million in annual revenue) may be facing a crisis of confidence in their current employers: More than a quarter (26%) of them say their loyalty to their employer is now poor/extremely poor (up from 3% prior to the pandemic), and only 32% report their motivation at work is good/extremely good. In contrast, at the largest TMT firms (more than US\$5 billion in annual revenue), 54% of women report their motivation is good/extremely good, and just 12% say their loyalty is poor/extremely poor. See: Deloitte, *Women @ Work: A global outlook, May 19, 2021*.
7. In November/December 2019, Silicon Valley Bank surveyed more than 700 technology startup executives in innovation hubs, mainly in the United States, United Kingdom, Canada, and China. See: Silicon Valley Bank, *2020 global startup outlook, 2020*.
8. Taking a broader view of IT roles across industries, a Deloitte analysis of US IT employment data by gender reveals an interesting trend: The percentage of women rose incrementally from 2016 to 2019 (about 0.3 points per year) but fell 0.8 points from 2019 to 2020, to 24.2%. This suggests that women may hold a slightly higher proportion of tech roles in industries outside the tech sector—but the growth appears to have hit a roadblock during the pandemic.
9. Deloitte, *Women in IT jobs: It is about education, but also about more than just education: TMT Predictions 2016*, January 13, 2016.
10. The Deloitte *Women @ Work* study surveyed 5,000 full- or part-time employed women aged 18–64 across 10 countries (Australia, Brazil, Canada, China, Germany, India, Japan, South Africa, United Kingdom, and United States) between November 2020 and March 2021. Respondents were diverse in terms of seniority, from C-level executives to nonmanagerial employees. We specifically analyzed responses of 500 women in the TMT sector. While the study did not break out technology results, we believe the TMT findings are a good proxy for the technology sector. See: Deloitte, *Women @ Work: A global outlook*.

11. Ibid. Sixty-two percent of TMT women report the amount of time spent completing chores and house-management tasks has increased during the pandemic; 53% say the amount of time spent looking after other dependents (such as elderly or disabled relatives) has increased, and 49% say the amount of time spent looking after children has increased.
12. Ibid.
13. Ibid. The proportion of employers that have established programs and policies to help mitigate the impact of the pandemic on the well-being of employees is surprisingly low: 27% of TMT women say their employer has reviewed and/or reset employee objectives to ensure they are realistic given the current circumstances; 26% say their employer has established regular check-ins with line managers to ensure they are OK; 23% say their employer has increased access to resources (such as counseling) to support mental health; and just 17% say their employer has provided paid time off to adjust to the new way of working (e.g., to fulfill caregiving responsibilities, or to establish a suitable working environment).
14. Google, *2021 diversity annual report*, July 1, 2021; Salesforce, "Creating a best workplace for parents during a pandemic requires intentionality," accessed October 5, 2021; IBM, *IBM 2020 diversity & inclusion report*, April 13, 2021.
15. Ibid. IBM created a range of flexibility and well-being programs in response to pulse surveys of female employees, such as free mental health counseling, part-time employment, and job-sharing arrangements. SAP and Cisco both established a "mental health day" to encourage employees to collectively disconnect. Salesforce inaugurated a weekly well-being video series in which experts offer coping skills and resources, as well as livestreams with educational and fun programs to entertain employees' children. Also see: Kathryn Mayer, "Software giant adds mental health day to ease COVID-related stress," *Human Resource Executive*, March 9, 2021.
16. Katherine Bindley, "Work-from-anywhere perks give Silicon Valley a new edge in talent war," *Wall Street Journal*, July 27, 2021.
17. Ibid.
18. Kristi Lamar and Anjali Shaikh, *Cultivating diversity, equity, and inclusion: How CIOs recruit and retain experienced women in tech*, Deloitte Insights, March 5, 2021.
19. Pamela Maynard, "Are we really closing the gender gap in tech?," *Forbes*, March 3, 2021; Macy Bayern, "Why more than half of women leave the tech industry," *Tech Republic*, October 1, 2019; Sarah K. White, "Women in tech statistics: The hard truths of an uphill battle," *CIO*, March 8, 2021.
20. Lamar and Shaikh, *Cultivating diversity, equity, and inclusion*.
21. Sylvia Ann Hewlett, Melinda Marshall, and Laura Sherbin, "How diversity can drive innovation," *Harvard Business Review*, December 2013; Beth Castle, "'You have to see it to be it': Why women role models are key to gender equality," *InHerSight*, March 7, 2021.
22. Deloitte, *Women @ Work: A global outlook*.

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