

**Research Brief**  
IBV Diversity & Inclusion Series: Gender

# Dismantling the glass ceiling

Actions to advance  
gender equality  
in the workplace

*In collaboration with*  
National Organization for Women - New York City (NOW-NYC)



**IBM Institute for  
Business Value**



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2020 was a watershed year for women. The number of female CEOs in the Fortune 500 hit an all-time high.<sup>1</sup> Billie Eilish became the first woman to sweep the Grammys.<sup>2</sup> And Americans voted a record number of women into the US Congress—which will be led by the country's first female Vice President, Kamala Harris.<sup>3</sup>

Even amidst the chaos of COVID-19, women broke records and made history. But, in many ways, these are the exceptions that prove the rule. In 2020, women in the US saw massive job losses—with women accounting for all of the 140,000 net job losses in the US in December.<sup>4</sup> In total, more than 5 million women left the US labor force in 2020<sup>5</sup>, putting the female participation rate at 57%— the lowest it's been since 1998, according to the National Women's Law Center.<sup>6</sup>

Add the pandemic impact to historical disinterest in advancing gender equity, and you reach the conclusion highlighted in our recent study on women and leadership: the pipeline of qualified women is shrinking—fast.<sup>7</sup>

After so many decades of struggle and progress, why are women backsliding? And why do times of crisis continue to hit them harder than their male peers?

To better understand the experiences of women in the workforce, the IBM Institute for Business Value (IBV) interviewed nearly 7,000 people in August 2020 and January 2021, including equal numbers of men and women in the sample. No respondents self-identified as non-binary.

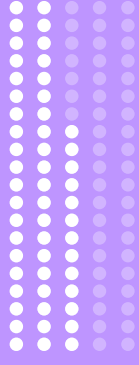
**Room to grow**  
Most women feel that gender bias and discrimination has held them back.



**69%**  
believe they have been discriminated against because of their gender



**58%**  
believe they have had to work harder to succeed due their identity



**53%**  
believe women are less successful than the general US population

What we found was less than empowering. Most women (53%) believe women are less successful than the general US population, and 58% believe they have had to work harder to succeed due to one or more aspects of their identity. Nearly 7 in 10 say they've been discriminated against because of their gender.

From unconscious bias to outright misogyny, women have to overcome an exhausting set of unique obstacles on their road to success. And those living outside the gender binary face unique challenges all their own. But each barred door can be unlocked—as long as someone in power is willing to turn the key.

What would it look like if those doors were opened? To find out, IBM hosted a Women's Leadership Jam, in collaboration with the National Organization for Women—NYC, to explore the barriers to gender equality in the workplace (see methodology on pg 11).

More than 3,000 business leaders, subject matter experts, and thought leaders—women and allies—came together to discuss obstacles to women's advancement and how organizations can remove them. Jam sessions covered topics ranging from how technology can help eliminate gender biases to allyship and the role men play.

What Jammers said was powerful. And the solutions they offered weren't as elusive as one might think. Pairing the results of the IBM gender discrimination survey with comments from Jam participants, we've identified 6 key actions organizations can take to level the playing field for women and create more equal opportunities for all.

- 1. Help women maintain work-life balance**
- 2. Understand the impact of gender bias**
- 3. Empower women of color**
- 4. Train men to be allies**
- 5. Use technology to reduce discrimination**
- 6. Make STEM careers more accessible and inclusive**

Read on for specific steps your organization can take to make meaningful progress toward gender equality in the workplace.

## 1. Help women maintain work-life balance

For decades, well-meaning leaders have tried to advance economic equality by treating women “just like men.” While that sounds good in theory, this approach denies the unique reality of the female experience. The UN estimates that women do at least two and a half times more unpaid household and care work than men. And when hours spent doing paid and unpaid labor are combined, women in both developed and developing nations work at least 30 minutes more per day than men.<sup>8</sup>

With women responsible for the lion’s share of family caregiving, flexible scheduling is a valuable tool for keeping them in the workforce. In our January 2021 consumer survey, more than one-third of respondents—both men and women—said they have asked their employer for more flexible work arrangements, improved compensation and benefits, and more physical and financial safety and security in the past year. However, only about half of employees gave employers high marks on their ability to deliver on those requests.<sup>9</sup>

Giving parents the freedom to work around school schedules, doctors’ appointments, and other urgent personal needs will be critical for attracting and retaining talent in the future—and will also make it easier for woman to balance their families and their careers.

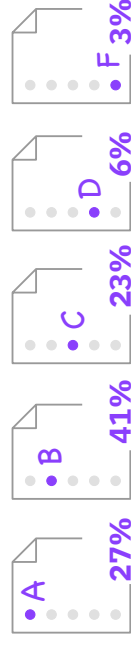
“A culture of empathy and openness is key to bringing women back to the workforce,” one Jam participant said. “Women need the flexibility to step back and address non-work-related important responsibilities without guilt.”

### The how-to guide: Balancing work and life

- *Reset expectations about what leadership looks like.* Redefine success so that promotions and project assignments aren’t defined by the number of hours someone spends in the office.
- *Adopt new hybrid models for returning to in-office work.* Create more flexibility in the traditional workday to accommodate family caregiving needs.
- *Offer family-friendly benefits packages.* Parental leave, childcare stipends, and flextime can help women remain in the workforce while fulfilling family obligations. 50% of Jammers identified flexible, remote working options as the most important benefits companies can offer as we go back to the office after COVID.

## Passing grades

We asked Jammers: What grade would you give your employer for efforts to promote gender diversity and inclusion at all levels of your company?



*COVID has allowed us a window view into our ‘true lives’... I hope when we do return to the office, whatever that looks like, it includes more honesty about our whole selves and what’s going on both at work and home.*

—Women’s Leadership Jam participant



## 2. Understand the impact of gender bias

No one wants to see themselves as biased. But scientists have identified more than 180 human biases,<sup>10</sup> which means even people with the best intentions have preconceived notions that are difficult to overcome.

Specifically, women in business struggle with what's called a "double-blind" bias—the mismatch between what is expected of a woman and what is expected of a leader. While women are expected to be caring, gentle, and deferential, leaders need to be bold, courageous, and assertive—which are attributes traditionally assigned to men.<sup>11</sup> This disconnect often leads managers, both male and female, to assume that a man would be a better fit for a leadership position.

In our research, a large majority of women (76%) and men (72%) alike say they believe discrimination against women exists in American society. And 38% of women and 33% of men say they think gender bias exists in their workplace. One Women's Jam participant recounted an instance where her female manager told her, "You're too emotional for a management position." She was surprised to hear that from another woman, but still felt strongly that the comment was related to her gender. "A man never would have had those things said to them."

This anecdotal experience speaks to the larger and more disturbing trend identified in our recent study "Women, leadership, and missed opportunities," which compared the number of professional women today with 2019. It revealed that the pipeline of women needed to fill open executive positions has narrowed. Fewer women hold senior vice president, vice president, director, and manager roles in 2021 than in 2019.<sup>12</sup>

## The shrinking pipeline

Since 2019, the pipeline of women for leadership roles has gotten smaller.



“  
*I just read the IBV report and feel punched in the gut. I knew it was bad but this is a tough one to swallow.*  
 —“Women, leadership, and missed opportunities” reader”

Without immediate intervention, this loss of future leadership talent poses a major long-term risk for organizations and the global economy.

**The how-to guide: Overcoming gender bias**

- *Re-evaluate gender-specific tasks.* Rotating administrative tasks, such as note-taking, helps women avoid being pushed into support roles that can hurt their prospects for advancement.
- *Invest in training for women.* Building business skills and financial acumen can help women elevate their status in the organization and combat gender stereotypes.
- *Establish expectations for psychological safety and accountability.* Cultural change takes time, but it happens faster when people know they will be held accountable for their words and actions.

“  
*Make inclusion a core competency requirement for people managers; give them the skills to enable, identify and challenge biases that show up in key career milestones, such as performance management and talent development.*  
”

—Women’s Leadership Jam participant

“  
*Many times, women create barriers for themselves due to the pre-conditioning and biases that are ingrained in them throughout their lives.*  
  
*Looking at our own potential through a different lens might actually help bolster our careers in a much more meaningful way.*  
”

—Women’s Leadership Jam participants

### 3. Empower women of color

It's impossible to talk about gender discrimination without looking at the unique challenges women of color face.

For example, recent IBV research on Hispanic talent found that Black and Brown women experience much more discrimination due to their race or ethnicity than their gender. 86% of Hispanic women have experienced discrimination because of their ethnicity, compared to 70% who have been discriminated against because of their gender.<sup>13</sup> In the same vein, our gender discrimination survey found that 51% of Black women and 43% of Hispanic women feel that their employer discriminates against people who share their racial/ethnic identity.

Because racial bias, discrimination, and economic inequality are systemic problems, they require systemic solutions. That means inclusion and equity programs need to be strategic—and measurable—to make a real impact.

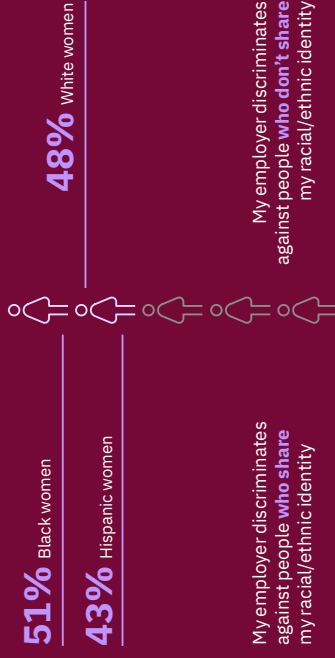
“The empowerment and inclusivity should be at all levels of the corporate ladder. It should be coded into the organization’s DNA,” one Jam participant said. “Leaders should be assessed on how they have empowered minority women, what kind of initiatives they have taken to support women in their team, and what were the results.”

#### The how-to guide: Supporting women of color

- *Commit to equal pay.* Setting standard salary ranges rather than making offers based on salary history is necessary to begin to address decades—even centuries—of economic exploitation and discrimination.
- *Train leaders to mentor and sponsor minority women.* People from different backgrounds may feel ill-equipped to support minority women in the workplace, but building that bridge is key to increasing diversity in the executive ranks.
- *Offer flexible work arrangements to promote mental health.* A hybrid work model can offer a temporary reprieve from the unique stressors minority women encounter in the workplace.

## Stacked biases

Black, White, and Hispanic women agree that employers discriminate against minority women.



“If, in every conversation with a woman, a man would assume that the woman knows what she is talking about—and treat her accordingly—that would make a big difference.”

—Dr. Paula Stone Williams  
Jam VIP guest, TED speaker, and transgender author of “As a Woman”

“Most men understand, to some degree, what it means to be a woman in the workplace, but they don’t always know what they can do to be supportive of women.”

The challenge is getting some high-level male leaders to be VOCAL ADVOCATES. If executive-level men show that it is important and model the behavior, it will encourage more men to do the same.

—Women’s Leadership Jam participants

#### 4. Train men to be allies

Professional advancement is often less about what you know and more about who you know. As executives strive to make their leadership teams more diverse and equitable, they need to look closely at the informal networks that stretch across their organizations and find ways to bring women into the fold.

This is a process that men must lead. And while that leadership will look different at different organizations, mentorship and sponsorship is likely a big piece of the puzzle.

Recent data from PayScale found that female professionals with a woman sponsor earn 14.6% less than women who have a male sponsor. This speaks to the value of creating a network of male allies for junior women.<sup>24</sup> Yet our survey found that only 22% of female junior managers say they have benefitted from informal mentorship during their career, and only 31% of female junior managers say they have benefitted from formal mentorship.

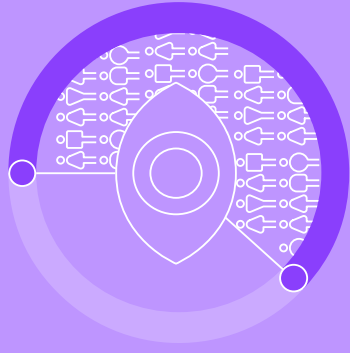
Men can also be strong allies by standing in solidarity with their female colleagues, reports, and bosses when other men try to diminish their authority or worth. “Since most of the power brokers inside of corporations are men, they may ultimately be the decision makers,” said one Jam participant. “When a client, or another employee or staff member, tries to do an ‘end-run’ around a woman because they don’t like her answer, it is very empowering if that senior male leader redirects the individual back to the woman to make those decisions.”

#### The how-to guide: Teaching men to advocate for women

- Create formal training programs for men about what it will take to end gender discrimination. 83% of men who joined the Women’s Leadership Jam agreed that men need more training to be effective allies. Clearly explain the changes the organization wants to make—and the rationale behind those changes—to get men on board.
- Connect male mentors and sponsors with junior women. Build bridges to create more advancement opportunities that will funnel women into the leadership pipeline.
- Create reverse mentorship opportunities. Women mentors can help men understand the unique challenges women face in the workplace. As one Jammer put it: “What if companies set targets for a certain number of men to be mentored by women... with a goal to understand gender bias experience and have meaningful conversations to learn.”

## Is AI gender-blind?

Women see technology as a promising solution to an age-old problem.



**62%** believe the use of AI-based technologies for recruiting, hiring, or promotions can lead to a more diverse workplace.

## 5. Use technology to reduce discrimination

Artificial intelligence (AI) can help combat bias and discrimination by offering a more objective view of employees and job candidates. Bias-identification capabilities, such as highlighting when managers use different words to provide similar feedback for male and female workers, allow organizations to identify issues and course-correct.

And this trend is on the rise. According to the IBV Women & Leadership study, the portion of organizations using some form of gender-blind job candidate screening jumped from 56% in 2019 to 64% in 2021.<sup>15</sup> And this shift offers new hope for working women. 62% of the respondents in our gender discrimination survey believe the use of AI-based technologies for recruiting, hiring, or promotions can lead to a more diverse workplace.

Of course, AI can only be as objective as it's designed to be. Assumptions based on existing data—such as the higher salary rates of men—can lead to the perpetuation of existing inequalities. As companies adopt AI to inform the screening process, it's important to develop an AI ethics team with diverse staff to ensure the process is working as intended. Today, women represent just 26% of the data and AI workforce, according to the World Economic Forum.<sup>16</sup>

"The underlying AI models we use daily have such a subtle but significant impact on how bias is reinforced in society," said one Jam participant. "The more awareness people have about bias in everyday algorithms, the better!"

### The how-to guide: Address discrimination with AI

- Use advanced analytics to track hiring and promotion metrics by gender. Discover where men are being hired and promoted more often than women and take steps to even the scales.
- Address implicit bias in the development and implementation of AI. Produce fact sheets to document how fairness was worked into the systems training, and what type of testing was done to avert bias.
- Create an AI ethics team. Engage experts from diverse backgrounds to reduce the potential harm that poorly designed AI could cause.

## 6. Make STEM careers more accessible and inclusive

Science, technology, engineering, and math (STEM) fields have always been dominated by men, with women only recently making notable progress toward parity. While women make up over half (52%) of the college-educated workforce, women fill only 29% of science and engineering positions, according to a 2020 report by the National Science Board. Even now, only 27% of computer and mathematical scientists and 16% of engineers are women.<sup>37</sup>

This imbalance contributes to gender pay inequality, as these positions generally come with above-average pay. The typical STEM worker now earns two-thirds more than non-STEM workers, according to Pew Research Center.<sup>38</sup> But a shortage of women on technical teams has implications for organizations, as well. They run the risk of developing tunnel vision—and missing big problems or opportunities—without gender diversity within their ranks.

Promoting more women leaders is a major step tech companies can take to do better, one Jam participant said. “It’s critical that women see other women in their organizations in key leadership positions, on stage presenting, and being actively listened to in meetings. That visibility is one of the most empowering things an organization can do.”

### The how-to guide: Nurturing women for STEM success

- *Define and discuss gender stereotypes and prejudices.* Foster a culture that encourages women to share their experiences, and change policies and practices to prioritize their needs.
- *Address the loneliness and isolation women in STEM often face.* Elevate women in the workplace to provide positive role models and promote a feeling of belonging for junior women on the team.
- *Create open idea labs or host hackathons.* Sponsor an event or partner with a non-profit to identify women to fill your organization’s future leadership pipeline.



*I remember feeling uncomfortable being one of two women in my university’s advanced database class. I dropped out by the end of the first week. By the end of the year, my friends and I built our university’s first all-female identifying hackathon to help bridge the gender gap and provide a safe space for all women to code.*

—Women’s Leadership Jam participant

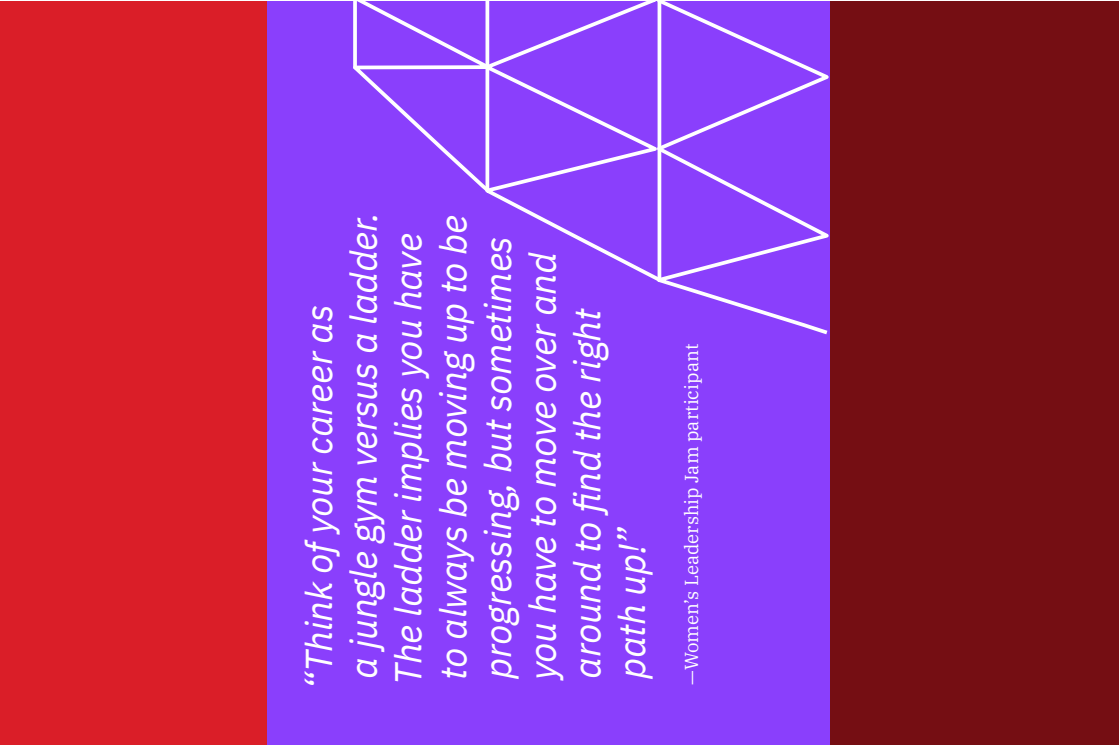


## At the crossroads

These proactive steps can help organizations make great strides toward gender equity, but in order to level playing field for all women, we need to continue looking closely at the intersectional challenges women and non-binary people face.

Gender. Race. Ethnicity. Sexual orientation. Age. Ability. Women understand that these different identities overlap to define how others view them—and how they are treated in the workplace. To uncover and address the needs of women in these identity groups, the IBV will publish several additional gender-focused reports over the course of 2021.

Because there is no such thing as “the average woman.” And there can be no equality until there’s equality for all.



*“Think of your career as  
a jungle gym versus a ladder.  
The ladder implies you have  
to always be moving up to be  
progressing, but sometimes  
you have to move over and  
around to find the right  
path up!”*

—Women’s Leadership Jam participant

## Who are the Women's Leadership jammers?

### Women's Leadership Jam summary:

- 32 consecutive hours of virtual jamming
- 7 hosts, 30 facilitators, and 9 topic area guests
- 5,700 registrations, 3,100 unique logins
  - Average jammer returned 5 times and spent 3.5 hours in the Jam
  - 42% US, 16% Europe, 18% Asia
- 2,700 comments generated 240,000 words (equivalent to 3 books!)
- 45 poll questions generated 29,000 unique data points

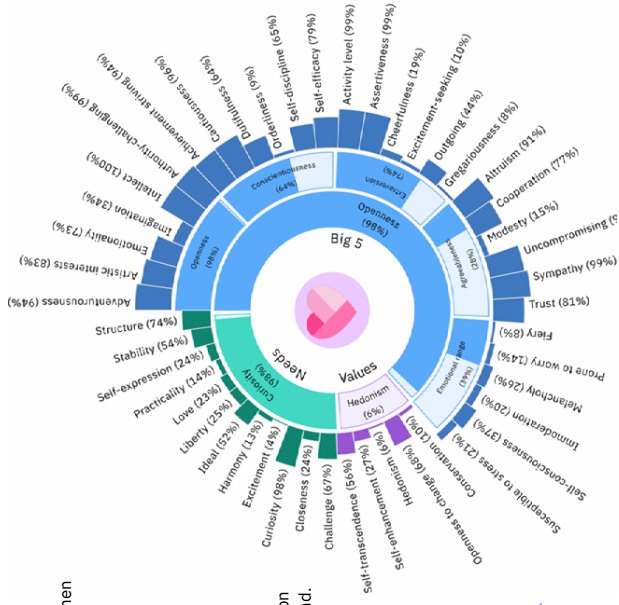
Jam technology uses Watson Personality Insights in an experimental approach to define a Jammer "persona" based on the psychology of language in combination with data analytics algorithms. Watson analyzes the Jam content and returns a personality profile of the Jam collective. Here's what we found.

### Women's Leadership Jammers:

- are clever and expressive
- are open to and intrigued by new ideas
- prefer to challenge authority and traditional thinking to help bring about positive changes
- are individualists
- prefer activities with a purpose greater than just personal enjoyment.

### Jam conversation topics:

- Improving access for women in STEM and using technology to mitigate bias
- Impact of gender bias on women's careers and specific challenges facing minority women
- COVID's impact on women in the workforce
- The role men can play as allies



“*In this Jam, I learned it is not enough to do a great job, and have great metrics and results. I will pay attention to how my peers and management perceive my contributions to success.*”

—Women's Leadership Jam participant

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## NOW-NYC

NOW-NYC, one of 550 chapters of the National Organization for Women, ignites change for the women and girls of New York. We advance laws, empower women in the workplace, promote women's leadership, and work to end violence against women. NOW-NYC recognizes trailblazing leaders through its annual Women of Power and Influence Awards.

## About IBM InnovationJam®

In addition to our quantitative survey, the IBV hosted a global two-day virtual Jam—the IBM Women's Leadership Jam—in cooperation with the New York City chapter of the National Organization of Women. Six concurrent sessions covered topics ranging from how technology can help eliminate gender biases to allyship and the role men play.

With more than 2,600 comments contributed and nearly 30,000 data points generated from polls, we used the IBM InnovationJam® AI Dashboard with Watson Natural Language Understanding (NLU) and IBM Research Project Debater. Key Point Analysis to identify conversation themes, sentiment, and insights for suggested improvements. To learn more, visit <https://www.collaborationjam.com>.

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