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2018 Women in Tech:
Unconscious Bias, Parity, and the Path Forward
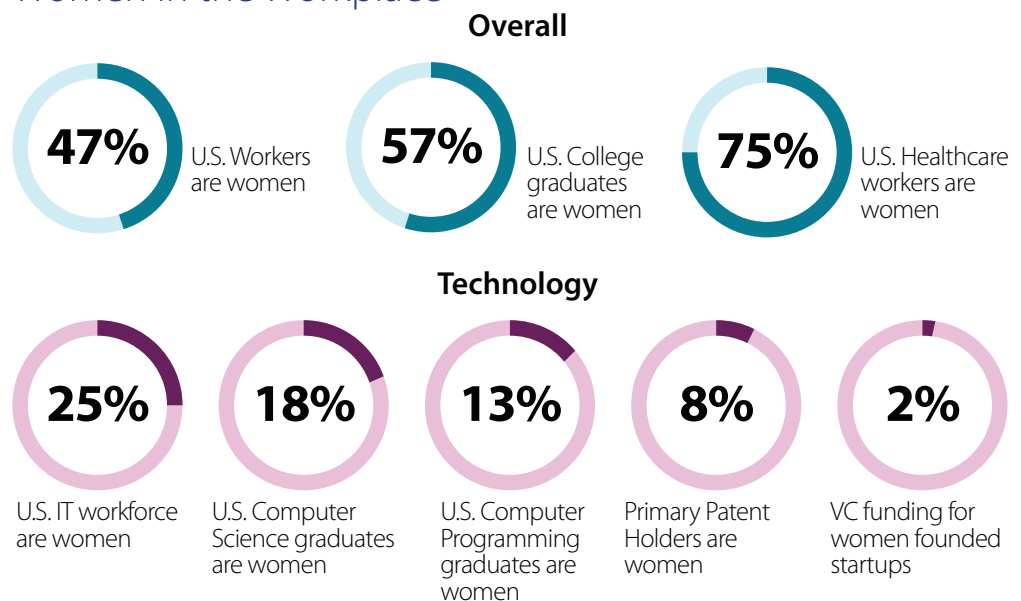
Background

In the United States today, women account for 47% of the overall workforce, yet only 25% of IT workers are female according to the Bureau of Labor Statistics (BLS). The tech industry's efforts to raise the inclusivity of women as employees have been sporadic and inconsistent over the last 50 years, though the issue has certainly gained more notoriety in recent years. Yet despite employers' efforts to introduce numerous programs to help educate, hire and retain women in technology, women remain significantly underrepresented at all levels. Fortunately, the tech industry continues to grow at a breathtaking pace and that growth demands faster change. In fact, The BLS lists application software developers and information security analysts among the fastest growing occupations in the U.S. over the next decade (see Figure 1).

FIGURE 1

Women in the Workplace

Overall

47% U.S. Workers are women

57% U.S. College graduates are women

75% U.S. Healthcare workers are women

Technology

25% U.S. IT workforce are women

18% U.S. Computer Science graduates are women

13% U.S. Computer Programming graduates are women

8% Primary Patent Holders are women

2% VC funding for women founded startups

Source: Bureau of Labor Statistics, 2018; U.S. Department of Education, National Center for Education Statistics, 2018; WIPO, 2018; Pitchbook, 2017

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Survey Methodology

In June 2018, WITI (Women in Technology International) in partnership with IDC and Randstad Technologies, completed a worldwide web-based survey of 1,120 women and men employed in either tech-based roles and/or working in the tech industry. More than 860 women and 250 men participated in the survey. The inclusion of both men and women in the study is to demonstrate the differences that exist in gender-based opinions in the IT workplace and to highlight the degree of unconscious bias. The survey examined how men and women approach and perceive diversity and inclusion at their organization, their career aspirations, how they choose employers and what they consider the solution to gender inequality at their organization. Additionally, respondents provided information about the role of mentors in their career, issues around pay equity and the impact of discrimination and harassment in the workplace.

The final composition for the survey is as follows:

» **Gender:** Women (77%); Men (23%)

» **Region:** U.S.-based (87%); International (13%)

» **Annual household income (USD):** <$150,000 (46%); $150,000+ (54%)

» **Race:** White (71%); Non-White (29%)

Situation Overview

More than 4.5 million U.S. workers are currently employed in a technology role today and the BLS predicts there will be 600,000 new IT jobs by 2026. Over the next eight years, IT jobs are projected to grow at twice the national rate.

Women are Minority Employees at Technology Organizations

Despite the substantial growth (and need for qualified workers) in the IT workforce, and despite women now accounting for almost half of U.S. workers, they are considered a minority population in technology.

» Women are significantly underrepresented in IT jobs and at IT companies. In the U.S., more women now graduate college than men. Last year, 57% of all college graduates were women, yet only 25% of all IT jobs in the U.S. are held by women today. In the U.S., 18% of computer science graduates are women and only 13% of U.S. computer programming graduates are women.

» Women have significantly less access to cash, capital and funding. Worldwide, only 8% of primary patent holders are women and 2% of VC funding is for women-founded startups.

» Women have drastically increased their participation in all aspects of the STEM workforce over the last 50 years, except in technology. In the U.S., women now account for 40-50% of all graduates for medical school, law school and physical sciences, up from rates of 5-15% in the early 1970's. In U.S., 75% of all healthcare workers today are women. What this means for the technology sector is that the competition for qualified job candidates with technical capabilities has moved to other industries placing enormous pressure on educating and hiring women for technical and non-technical roles.

Diversity and Inclusion in Tech Remains Elusive; Gender Diversity is Rated at the Bottom of Major Inclusivity Measures at Technology Organizations

Survey respondents were asked to rate their organization's employee diversity across nine distinct categories for inclusion such as ethnicity/race, gender, age, sexual orientation, religion, socio-economic standing, politics and disabilities (see Figure 2). No category was rated as "very diverse" by the majority of respondents. Among the nine categories, ethnic diversity had the highest proportion of employees (47%) who considered their organization as "very diverse." Gender diversity was rated second to last of all nine areas of inclusion with just 31% of respondents viewing their organization as "very gender diverse."

FIGURE 2

The Lack of Diversity & Inclusion in Tech Points to Systemic Problems

Q How would you rate your organization in terms of its employee diversity on each of the following:
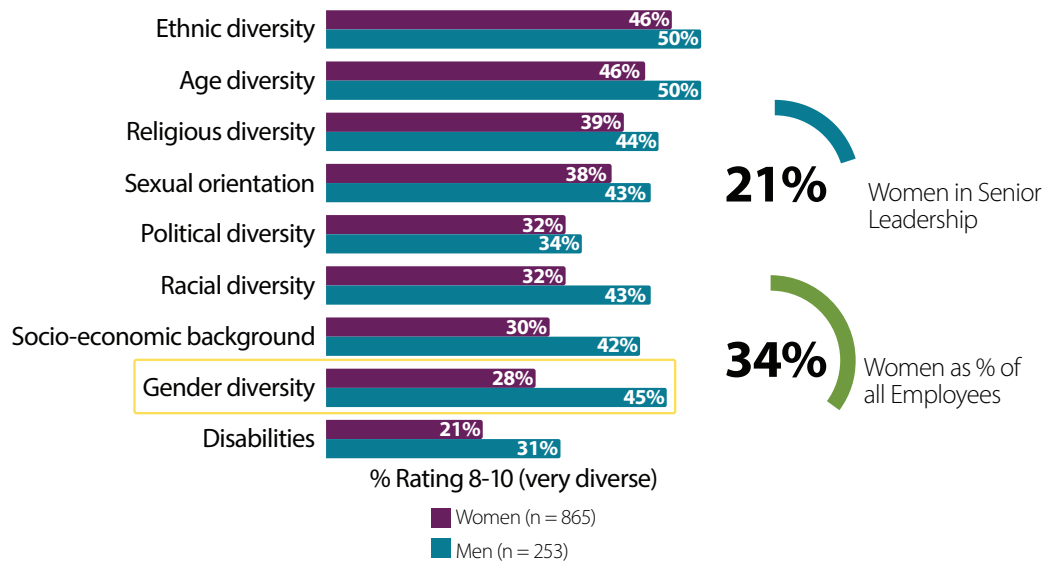
Source: IDC's Women in Technology Survey, June 2018

What is most apparent in this data is that men and women perceive the diversity of their organization very differently. Men are much more likely than women to view their organization as very diverse across all nine areas of inclusivity. It's notable that the greatest area of difference in opinion is for gender diversity. While there is an abundance of publicly available industry data and employment reports that demonstrate women are substantially underrepresented in technology roles and at technology companies, men are far less likely to perceive that gender inequality exists at their organization. This is a major hurdle to improving or achieving gender parity for several reasons:

» **Men must be part of the solution.** With 75% of all IT jobs held by men (and an even higher percentage in senior management), men must become advocates. Changes are needed in hiring, retention and promotion for women in IT. Acknowledging there is a problem is the first step to any kind of resolution; clearly more communication and accountability is required within technology organizations to get everyone to agree that the lack of gender diversity is an issue for their company.

» **Unconscious bias plays a huge role in determining outcomes.** People simply don't know what they don't know. Across 12 different statements that relate to overall conditions for women at their IT organization, men and women disagree on all except for one — that there is a lack of quality female candidates for STEM roles — and both genders appear to recognize this is an issue (see Figure 3). Our data shows that women are far more likely to observe gender bias at their company. To drive greater awareness, more education and information is required in the form of training and open conversations at technology organizations with HR, business leaders and the broader employee workforce.

» **The lack of participation of women in IT is not just a problem for the industry.** It's also a failing of policymakers and a worsening gender imbalance in the educational system. This issue is systemic and is not easily solved. It will require changes beyond what the IT industry alone can address. Yet major technology companies can make an enormous difference leading by example for the industry and setting the standards for best practice. Many companies already have programs and processes for informing their employees of their hiring and promotion policies and even setting quotas for gender diversity. Providing data that demonstrates the business imperatives of a diverse workforce, by setting aggressive goals for senior management and providing incentives for over-achievement of diversity goals are required.
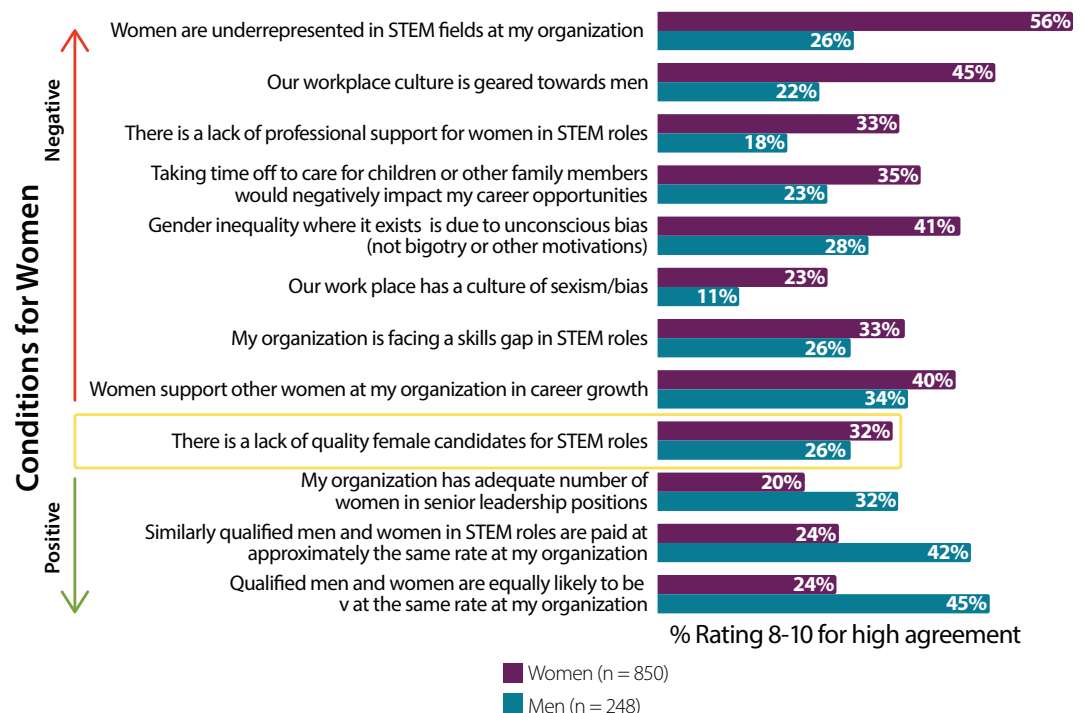
FIGURE 3

Unconscious Bias in the Workplace is Real

Q *Please rate your level of agreement with the following statements based on what you have seen or heard at your organization:*

Source: IDC's Women in Technology Survey, June 2018

Gender Diversity Goals at IT Organizations are Mediocre at Best

Mediocre goals lead to mediocre outcomes and current goals for gender diversity in the IT industry are very mediocre. Just over one-third of survey participants report that their organization has defined goals or targets for gender diversity; 42% were not sure (see Figure 4). Of those aware of their company's targets, almost two-thirds report that their goal is to improve the proportion of women as a percent of all employees (but not necessarily in equal numbers). Another 40% have goals to increase the proportion of new hires who are women. Only 16% have goals to achieve gender balance by a future date.
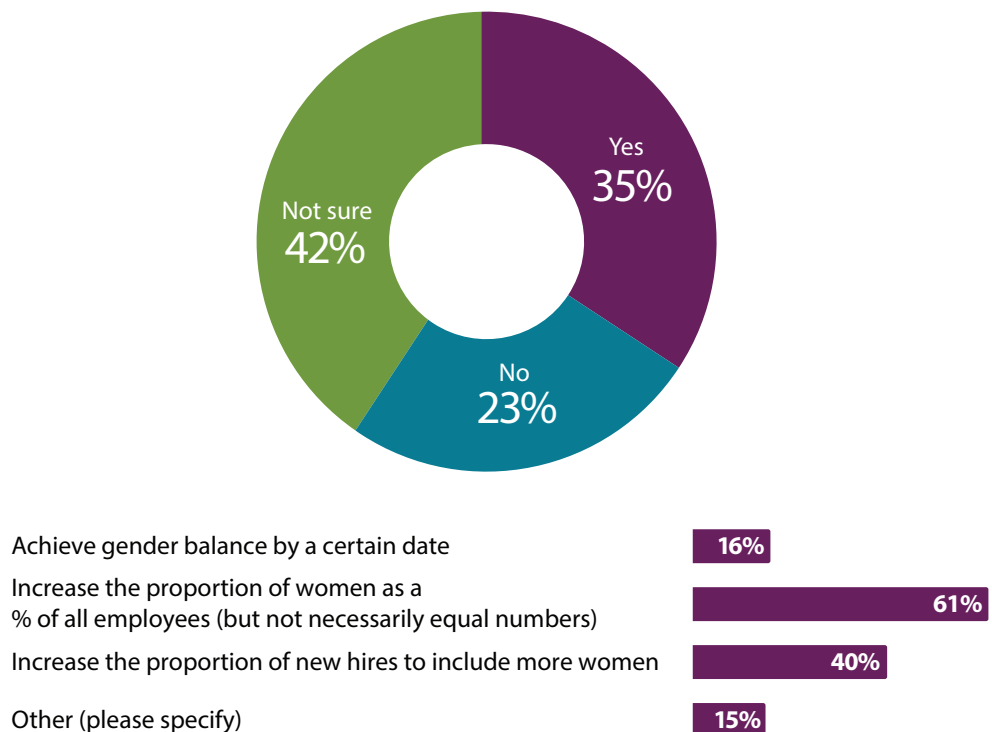
It should therefore not be surprising that achieving gender parity in tech is still a long way out. The lack of well-defined goal setting, lack of awareness of these goals among hiring managers and the lack of bold vision have precipitated gender inequality. IT organizations will also have to dramatically improve partnerships with local colleges and higher-education institutions to improve the available pool of qualified talent. Achieving gender parity will also mean competing and attracting talent from different industries with a focus on reskilling.

FIGURE 4

Company Diversity Goals & Strategies are Falling Short

Q   Does your organization have gender diversity goals or targets as part of its overall corporate agenda to increase the number of women in its employee ranks?

Q   What is your organization's gender diversity goals or targets?

Achieve gender balance by a certain date	16%
Increase the proportion of women as a % of all employees (but not necessarily equal numbers)	61%
Increase the proportion of new hires to include more women	40%
Other (please specify)	15%

Source: IDC's Women in Technology Survey, June 2018

Women in IT are Just as Ambitious as Men and Have the Same Career Aspirations

While it may seem obvious that women want the same outcomes from their career as men, there is a prevailing myth that women are somehow less ambitious, less dedicated to their work (in favor of home life) or have less aptitude for technical work. These falsehoods — while fading — carry a long tail of bias that impact promotions, workplace behavior and company benefits. The data in this study shows that men and women have very similar goals (see Figure 5); they place the same importance on measures of career success with few exceptions (see Figure 6).

FIGURE 5

Men and Women Want Very Similar Career Outcomes

Q   Which of the following are most important to you as measures of a successful job or career?
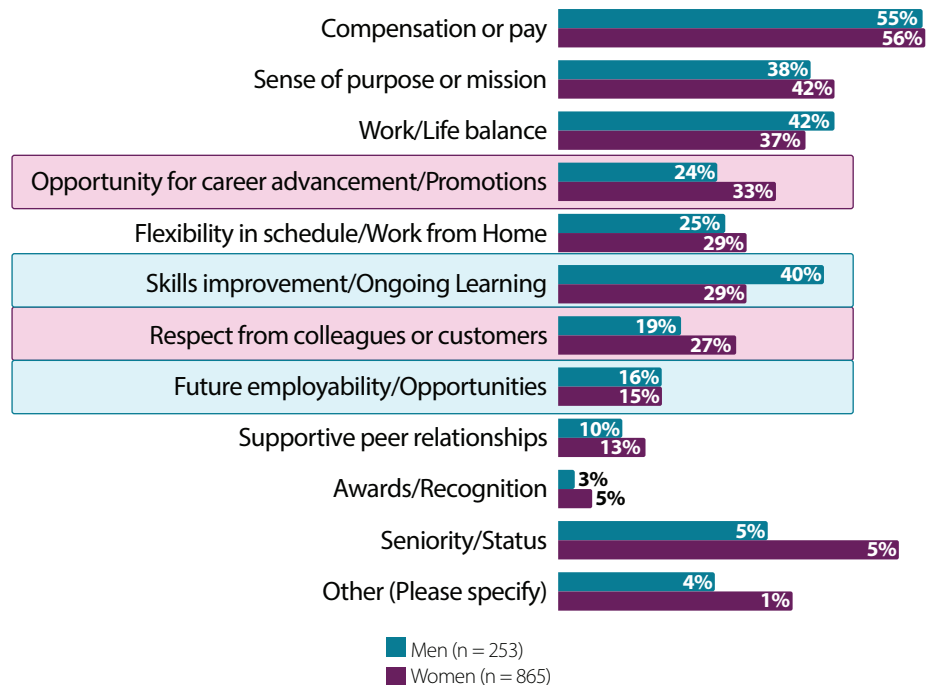
- **Pay** is #1 metric for both men and women
- **Sense of purpose/mission (#2)** and work/life balance (#3) are equally important

Women focus on **opportunities for advancement** and **respect** more often than men

Men are concerned with **skills improvement** and **future employability** - this is critical for an AI-infused tech environment

Measure	Men	Women
Compensation or pay	55%	56%
Sense of purpose or mission	38%	42%
Work/Life balance	42%	37%
Opportunity for career advancement/Promotions	24%	33%
Flexibility in schedule/Work from Home	25%	29%
Skills improvement/Ongoing Learning	40%	29%
Respect from colleagues or customers	19%	27%
Future employability/Opportunities	16%	15%
Supportive peer relationships	10%	13%
Awards/Recognition	3%	5%
Seniority/Status	5%	5%
Other (Please specify)	4%	1%

■ Men (n = 253)
■ Women (n = 865)

Source: IDC's Women in Technology Survey, June 2018

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FIGURE 6

Measuring Job Success – Gap Analysis for Women
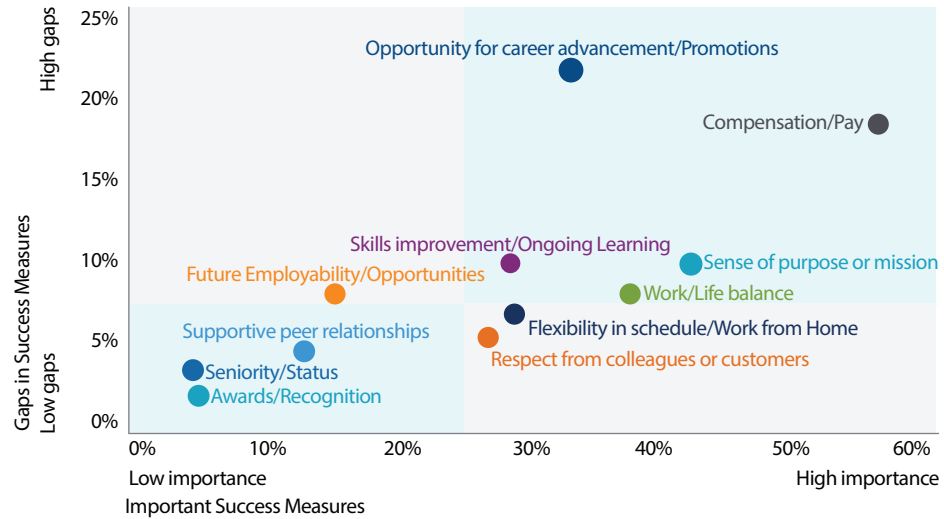
Source: IDC's Women in Technology Survey, June 2018

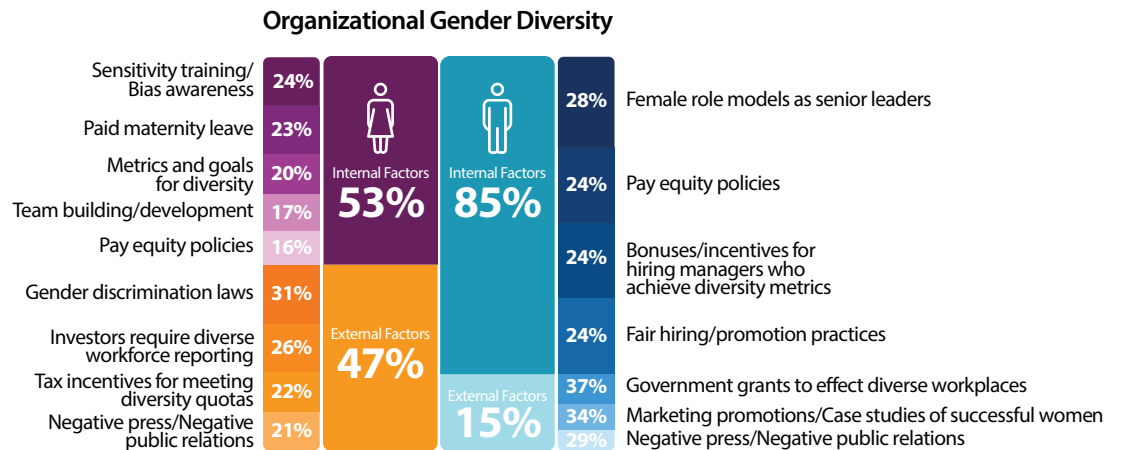## There is No Silver Bullet to Solving Gender Imbalance in Tech, But Pay Equity is an Obvious Next Step

In our study, we found that women tend to take a much more thorough approach to solving issues of workplace diversity compared to men (see Figure 7). Women are more likely to believe that factors external to their organization such as education or policy are required to make significant strides in achieving gender equity. They believe that half of the gender parity solution comes from internal changes to their company, while the other half of the solution lives outside of their organization in the form of legislation, mandatory reporting to investors, tax incentives and negative press.

Women believe that inside their organization, things like sensitivity training, paid maternity leave, better metrics/goals for diversity, team building and pay equity policies will be most effective at driving change. Men on the other hand view gender diversity more simply — 85% believe the solutions can be found internally within a company around four key areas: more senior female role models, pay equity policies, bonuses and incentives for hiring managers, and fair hiring and promotion practices (see Figure 7).

These findings demonstrate that while men focus on tangible factors to solve for gender diversity, women believe that more is required across the spectrum of making cultural changes. While men and women may take a different approach to solving issues of gender equality, they both agree that pay equity is a key step in changing the culture within their organization (see Figure 8).
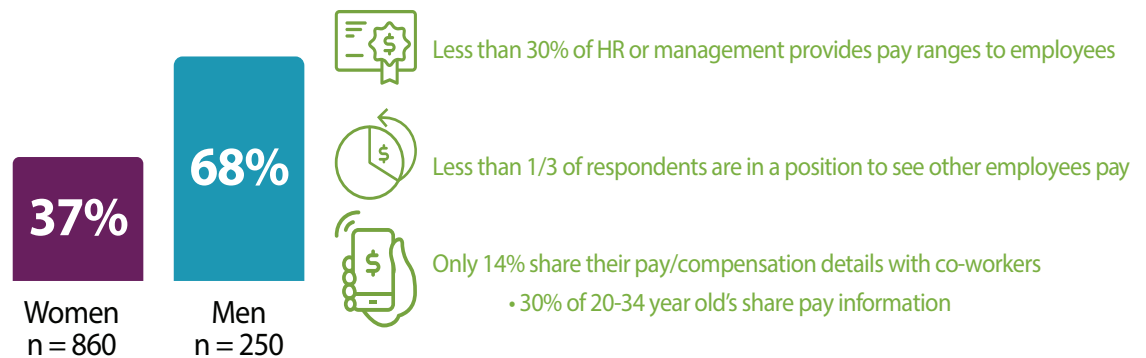
FIGURE 7

Solutions for Building a Diverse Workforce

Organizational Gender Diversity

	Women (Internal Factors 53% / External Factors 47%)	Men (Internal Factors 85% / External Factors 15%)	
Sensitivity training/Bias awareness	24%	28%	Female role models as senior leaders
Paid maternity leave	23%	24%	Pay equity policies
Metrics and goals for diversity	20%	24%	Bonuses/incentives for hiring managers who achieve diversity metrics
Team building/development	17%	24%	Fair hiring/promotion practices
Pay equity policies	16%	37%	Government grants to effect diverse workplaces
Gender discrimination laws	31%	34%	Marketing promotions/Case studies of successful women
Investors require diverse workforce reporting	26%	29%	Negative press/Negative public relations
Tax incentives for meeting diversity quotas	22%		
Negative press/Negative public relations	21%		

Source: IDC's Women in Technology Survey, June 2018

FIGURE 8

Solving the Gender Pay Gap Issue is a Top Priority

Q   Do you believe similarly qualified men and women are paid equally at your organization?

37%
Women
n = 860

68%
Men
n = 250

Less than 30% of HR or management provides pay ranges to employees

Less than 1/3 of respondents are in a position to see other employees pay

Only 14% share their pay/compensation details with co-workers
• 30% of 20-34 year old's share pay information

Source: IDC's Women in Technology Survey, June 2018

This report is the first in a series to be conducted by WITI, in partnership with IDC and Randstad Technologies. Visit witi.com/research to view the full survey results, get additional information, participate in future surveys and learn about ways you can help foster change.

IDC Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-insights-community.com
www.idc.com

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