



THE BOSTON CONSULTING GROUP

# DIGITALLY DRIVEN GENDER DIVERSITY

By Vanessa Lyon and Nadjia Yousif

**W**HEN COMPANIES ARE LOOKING to put more women into management positions, there are a few things they typically do. They set new quotas for the percentage of women in executive training programs. They rewrite their antidiscrimination policies and arrange for managers to take courses in gender bias. They institute flexible working models to encourage women to stay on the job throughout life changes—most commonly, when they start a family.

What companies don't always do is think tactically and strategically about how technology can help them achieve the goal of gender parity. Technology is helping companies achieve all sorts of strategic objectives; there's no reason why gender parity can't be one of them. "It's a good opportunity," says Bénédicte Chrétien, head of human resources at Crédit Agricole. Not taking advantage of technology, she adds, "could keep companies from achieving what they want to with diversity."

Indeed, the rapid changes that business is undergoing because of technology provide

women and organizations with a chance to address the problem of gender disparity from a new angle. The digital wave, by its nature, is equal opportunity: the job goes to the applicant with the right skills and an ability to adapt, regardless of gender.

BCG analyzed technology's potential in aiding companies' gender diversity efforts and concluded that technology can help in both short-term and long-term ways. In the short term, companies can use technology to support specific types of diversity interventions. Longer term, women who develop expertise in digital will be positioning themselves for leadership roles in the many companies whose success is dependent on their ability to innovate using technology.

Our analysis builds on a wide-ranging survey that BCG conducted into the efforts companies are making to increase gender diversity in their management ranks. (See *Getting the Most from Your Diversity Dollars*, BCG report, June 2017.) The 2017 survey, of some 17,500 workers in 21 countries,

showed that recruitment, retention, and advancement of high-potential women have become first-order priorities for many companies. It also showed that the investments companies are making to get there are often ineffective.

Technology alone isn't going to usher in a new age of gender parity. But it can support measures that advance the effort—including the reduction of unconscious bias and support for flexible working models. Technology can also be used in professional development. (See the exhibit below.) These are all areas that ranked high for effectiveness in BCG's survey.

### How Technology Can Help in Recruiting Women

Companies can't hope to attain gender parity in their top echelons if they don't have a steady stream of high-potential women joining the organization at lower levels. This puts the onus on companies to minimize gender bias in their hiring processes. The traditional way of doing this—through bias reduction training—is not particularly effective. In BCG's survey, only 25% of respondents saw bias reduction training as an effective intervention. That was roughly the same as the share who saw it as ineffective (23%).

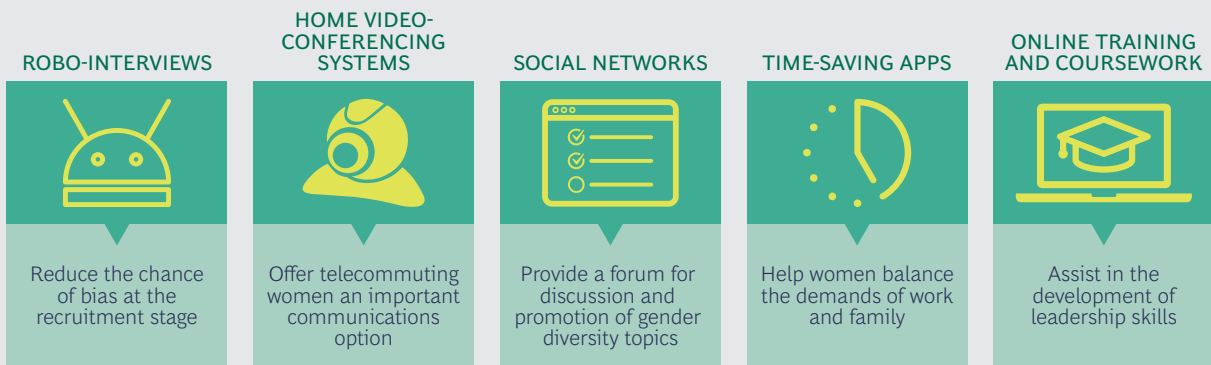
One technology-based solution to the bias problem that is gaining some traction is the robo-interview, in which a computer, not a human, conducts the initial interview, typi-

cally with a candidate who sits for the interview in front of a computer.

Early users of robo-interviews have found them valuable for a variety of reasons. For instance, Goldman Sachs is using them to cast a wider net at a time when its traditional practice of hiring from elite universities is bringing in too many recruits who aren't committed to banking. While Goldman is using robo-interviews to counter a specific type of resume bias, the artificial intelligence (AI) technology at the core of these systems can be applied in many different ways. It can be programmed to assess whether a candidate is similar to those who have succeeded at a company—in terms of the length and tone of answers to questions, for instance, or the handling of logic problems. This might enable hiring managers to disregard less relevant factors such as universities attended, favorite sports teams—and gender.

Some companies eliminate the possibility of gender bias at the screening stage—before the interview—by removing the candidate's name, the names of schools attended, and any extracurricular activities that might be giveaways. Omitting or changing names to avoid gender bias is not, of course, a new idea. It was a tactic used by Stephanie Shirley, the founder of one of Britain's most successful outsourced programming companies, when she first set up shop in 1962. (See the sidebar "A Pioneer Discusses the Challenges of Workplace Parity.")

### Technology "Interventions" That Can Promote Gender Diversity



Source: BCG analysis.

## A PIONEER DISCUSSES THE CHALLENGES OF WORKPLACE PARITY

*When she started her freelance programming company in the UK in 1962, Stephanie Shirley saw so much bias against women in the technology field that she would handle correspondence and bid for work under the name Steve. Believing that there were a lot of women like herself, with dependents or other family obligations, who would jump at the chance to work part-time in an exciting new field, her pioneering idea was to build a company of women-only coders.*

*Today, Dame Stephanie Shirley doesn't have to resort to camouflage. Since retiring in 1993 as one of the most successful female entrepreneurs in British history, she has devoted herself to philanthropy, including charities focused on autism.*

*BCG's Nadja Yousif recently spoke with Dame Stephanie about the continuing challenge of gender parity. The following interview was edited for brevity.*

**Decades after you made your mark, are you surprised that there are so few women in the executive ranks of most companies?**

Not so much surprised as bitterly disappointed. Some of the things that young women say to me are exactly how I was feeling 50-odd years ago. You would think things had moved on.

**Why do you suppose we aren't in a different place with gender parity?**

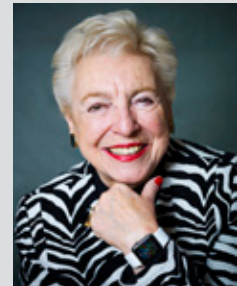
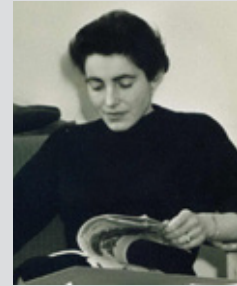
I may make myself a little unpopular with this answer. I think part of the problem is that women aren't prepared to pay the price of success. There is always a cost in energy and time and emotion. It can be done, certainly. To make a parallel, I started with evening classes. I didn't go to university. I got an honors degree in mathematics. I started my company while I was rearing a family, including my son who suffered from autism and was very vulnerable. This idea of going on working while taking care of the needs of a young family—there are no easy answers to how you do it. It's not something I would recommend to everyone.

**In its early days, your company consisted entirely of women who could only work part-time because of family commitments and who wouldn't have been considered for technical jobs elsewhere. Do women who start their own companies have an easier time finding a balance?**

Well, it allows you to have a culture that is whatever you want. You can create these opportunities that women are looking for: a work-life balance with flexibility. In my case, quite honestly, it made recruiting easy. I would get a steady stream of high-quality candidates who were being ignored by other people.

**What about women who have been out of the workforce and now want to rejoin and work in the technology field? How should they go about it?**

We're talking about women returners. They have to have training. But so does everybody have to have training, all the time. The technology field is moving so fast that everybody is out of date.



*Dame Stephanie Shirley in the 1960s and today.*

## A PIONEER DISCUSSES THE CHALLENGES OF WORKPLACE PARITY (continued)

What's the upside for a company in having more women executives? Why should they make it a priority?

It's 50% of the population—50% of your potential market. You're going to have a hard time exploiting that if women aren't participating in the decisions.

How should companies get there?

Start with the good, basic stuff: what gets measured gets managed. Make diversity part of the appraisal of each manager. It may not be 50/50 yet, but it has to be increasing year on year, quarter on quarter.

What advice would you give a woman who is at a stage in her career where there's a fork in the road and she's deciding whether to opt out or stay in?

If you're going to stay in, find something you really enjoy doing. And then just go ahead and do it. Other people's views are not important when you have a genuine desire to perform in a particular area. It's yours to grab.

In addition, technology can be used to find promising female candidates even earlier in the recruiting process. It's not news that companies can now find strong female candidates directly through LinkedIn. But they can also use social media in subtler ways to increase the diversity of their applicant pools. For example, the international utility company Engie, which is based outside of Paris, has a Facebook feed that emphasizes the organization's ecofriendly mission and commitment to renewable energy. According to executive vice president Pierre Deheunynck, the feed brings Engie to the attention of many potential female job applicants who would be unaware of the company if it limited itself to its traditional approach of recruiting at engineering schools.

### How Technology Can Help in Retaining Women

Women are much more likely than men to drop out of the workforce in order to focus on other parts of their lives—especially family. But contrary to popular perception, the higher workforce quit rate of women

has nothing to do with career ambition. Women with children are just as interested in leadership opportunities as women without children, survey work by BCG shows. (See “Dispelling the Myths of the Gender ‘Ambition Gap,’” BCG article, April 2017.)

However, women are much more likely to want to stay on the job after they have children at companies that try to accommodate their needs—such as by offering parental leave, job pauses, and the opportunity to telecommute. But it's important to note that women want more than just the freedom to shift their workplace to the home. They also want some assurance that they won't be marginalized or see their careers stagnate if they do.

Increasingly, technology can play a part in ensuring that women are as productive working from home as they were in the office. For example, communications technologies—including high-quality voice and video-conferencing software—are often key to successful flexible work arrangements, which were ranked the most effective

tive policy for promoting gender diversity in BCG's survey.

There is also software available that can help companies stay abreast of telecommuting challenges. A quick online survey—about work in general or a specific project—can provide a vital link to the office and a useful checkup. Done on a regular schedule, such surveys can reassure women who started working from home only recently that the company is interested in any problems they are experiencing. And if the surveys uncover any problems or disconnects, the fact that this information is being tracked can be reassuring. It sets the stage for feedback and training to take place.

Finally, companies can promote—and even subsidize—the use of apps that reduce the time and effort involved in nonwork activities, such as shopping and arranging for child care. This can be done through partnerships with outside service providers that don't cost the employer much but can make a substantial difference in the ability of employees—women, in particular—to juggle work and personal commitments, especially in cases where the female employee is also the primary caregiver at home. Concierge services of this sort are now common in Silicon Valley, where they are less a perk than a benefit that many companies feel they must offer in order to retain talented employees.

## Using Technology to Help Women Advance

Some companies have set up special programs to harness the energy of their most talented female workers. For example, Paris Pionnières, which is mainly an incubator for startups founded by women, also runs a program called Route 66 that Fortune 500 companies can offer to female employees who want to work on projects involving technology. Women in the Route 66 program devote 15% of their time over five months to developing a prototype product or service that they showcase on a “demo day.” For companies, it's an opportunity to help talented female employees attain

skills in the digital field (including digital product development), which can position them for leadership roles later on.

Other companies have set up their own digital social networks or online skills development programs for women. Groupe Renault, the multinational automobile manufacturer, launched the Women@Renault program seven years ago and now offers it in 14 countries. Renault's goal is to fill 30% of technical positions and 50% of sales positions with women and to increase the percentage of women in key positions. Women@Renault provides mentoring and training to help women realize their potential and develop their leadership skills. The company's online social network allows the program's members to discuss the progress of the equality initiative and exchange ideas about best practices.

At Commonwealth Bank of Australia, the Springboard Women's Development Program encourages women to develop executive skills: how to exert influence, negotiate assertively, develop a personal brand, network, and build strategic relationships. Until recently, most of this training was provided in person at group and individual sessions. But the bank is now starting to use Webex conferencing software to deliver the training remotely and customize it to the needs of its up-and-coming female workers.

Even when technology isn't involved in training, it is increasingly likely to be the training's focus. Whether a woman is aspiring to a management position in financial services, health care, or some explicitly digital field like internet services, her promotion may depend on how familiar she is with user interface and user experience design, agile software development, cloud computing, and other technologies. Women who don't have programming or computer science backgrounds need at least a grounding in these areas to be successful leaders. (See the sidebar “What Women Can Do for Themselves.”)

Unconscious bias is as common in the promotion phase as it is in the recruitment phase. Therefore a case can be made that an AI system—rather than the recommen-

## WHAT WOMEN CAN DO FOR THEMSELVES

The clear stake that they have in promoting more women into management—a growing body of research has established the benefits of gender parity—is prompting companies to look for ways to use technology to accelerate this process. However, women shouldn't wait for companies to help them build the digital skills they need; they should seek out opportunities to develop those skills on their own.

In particular, data analytics, digital marketing, and mobile app development are fruitful areas for skills development. These are fields in which the supply of available talent doesn't meet the demand, and salaries have risen accordingly. To be sure, it is still rarer for women than for men to pursue an advanced degree in computer science, and thus still rarer to find women running operations that involve a lot of computer programming or serving as scrum masters for software development projects. But women who have technology or digital expertise (acquired, perhaps, with the help of formal skills development organizations like General Assembly and Women Who Code) are appear-

ing in increasing numbers as managers in customer insight, customer research, and data analysis departments. In some cases, women avail themselves of self-learning opportunities—perhaps during a break from the workplace—to amass the knowledge they need to take on management roles in these and other parts of the digital economy.

The same do-it-yourself approach applies to networking. It isn't just about having a LinkedIn profile. Unlike women of previous generations, women today can use social media (Twitter being the most obvious example) to burnish their personal “brand,” increase their marketability, and establish themselves as thought leaders in business. Technology, in other words, enables a type of visibility that can put women on the short list when a management position opens up.

As Engie's Pierre Deheunynck suggests, in an era of digital innovation, there will no longer be a single path to success that will favor men. That will create opportunities for people with different profiles, including women.

dations of managers—should be used to identify not just candidates for interviews but candidates for advancement as well. After all, an AI system will not penalize or reward an employee based on his or her gender. Instead, it will tally performance review scores and perhaps compare the candidate's attributes with those of existing leaders at the company, thus helping the HR department and management decide who should be considered for promotion. In a world in which a woman's assertiveness in the workplace is still a double-edged sword—too much, and she may be seen as “pushy”; too little, and she may be passed over as not sufficiently ambitious—the unbiased judgment of a computer-generated score can help even out the number of male and female managers.

**I**T WOULD BE misleading to suggest that companies aren't already using technology to advance their gender diversity goals. That's what companies are doing every time they give a woman videoconferencing software to use in her home office; it's what they are doing when they pay for their female employees to take massive open online courses (MOOCs) or when they buy site licenses to websites like Everywoman, a resource geared to female managers. But these applications of technology's diversity-enabling features have tended to be somewhat haphazard—a little here, a little there. Companies should be much more strategic in how they use technology to advance diversity. It will put them right in step with the times.

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