The Network Effect:

How Women Beat the Odds to Get to the Top in Tech

WOMEN'S FORUM FOR THE ECONOMY & SOCIETY

BCG BOSTON CONSULTING GROUP

DaringCircles

by the Women's Forum for the Economy & Society

Foreword

In recent decades, significant efforts have been made to inspire and engage women and girls in science, technology, engineering and mathematics (STEM). Despite some progress, structural barriers persist — women and girls are not fully participating in these fields and therefore could miss out on some jobs of the future.

The situation is paradoxical, as employers report a skills shortage in most of the technical fields. Given that women account for only 28% of engineering graduates and 40% of graduates in computer science and informatics, they would constitute a significant pool of candidates, were they able to envision these professional pathways more clearly.

The Women's Forum has been advocating for 17 years on women's behalf to intensify the presence and influence of women across all spheres. With the creation of the Daring Circles Women4STEM and Women4AI in 2018, the Women's Forum highlighted the need to increase the representation, leadership and impact of women with STEM skills at all stages of the pipeline from school to the boardroom.

Drawing on our community's insights, this report — produced with our Knowledge Partner Boston Consulting Group — aims at creating a dynamic of awareness and change by presenting a concrete diagnostic along with pragmatic and innovative solutions to accelerate equality in STEM.

Indeed, we need to fight unconscious bias and gender stereotypes by taking action to improve talent management and encourage women's advancement, set actionable indicators and collect the relevant data sets, develop and leverage support ecosystems (mentors and role models, peer networks, coaches and sponsors).

It is also imperative that women are well represented in the cutting-edge field of artificial intelligence. According to the UN, only one in five professionals in AI is a woman. Like all technologies, AI has great potential for emancipation, but also for risks. We thus need to develop an ethical use of AI: implementation of techniques to remove bias; transparency on AI systems' reasoning; development of data sets with a gender equality lens; and assessment and audit of algorithms. AI also holds significant potential for generating positive change, whether it be through the design of gender-decoders aimed at uprooting subtle bias in job advertisements, or the implementation of new automated technologies, allowing women to access jobs transformed by tech.

I am convinced that economic empowerment of women will depend on our ability to fully involve them in scientific and technical disciplines. To all institutional, public and private actors, it is our collective responsibility to create an ever-growing community involved in changing mentalities and empowering women. In order to go above and beyond the tremendous work achieved, together, let's Raise women's voices, Create change!

Anne-Gabrielle Heilbronner
President, Women's Forum for the Economy & Society

The Network Effect:

How Women Beat the Odds to Get to the Top in Tech

By Ashley Dartnell, Neveen Awad, Nadjia Yousif, Matt Krentz, Susanne Locklair, Sophie Lambin, and Jake Morris

Getting to the top in technology is tough—and it's especially tough for women. They often face hurdles to becoming senior leaders. Many of those who have summited to leadership describe workplaces with boys' club elements, few women role models, ongoing struggles for recognition and respect, and, on top of all that, the disproportionate demands of caregiving that they often shoulder. At the same time, women leaders cite high satisfaction and rewards from working in one of the most attractive industries, as well as an enormous scope to make a positive impact in the world.

It is critical that tech companies clearly understand what's necessary to accelerate women's rise through the ranks—not only because it's the right thing to do, but because companies have an economic interest in this. The competition to hire talented candidates for tech positions continues to be intense, and tech roles will be even harder to fill if women continue to be underrepresented in the industry and corporate tech functions.

Survey Methodology

This article is based on a survey of 1,533 women and men leaders in the technology industry, as well as technologists in non-tech industries (from the C-suite level to the C-suite-minus-three level). It was conducted in February 2022 in France, Germany, Italy, and the UK—the four countries with the highest GDPs in Europe. In non-tech companies, we surveyed technologists who work in functions such as research and development, engineering, and technology. In technology companies, we surveyed employees in all functions except HR, marketing, and finance.

When we share an aggregated view of the survey results, it's because the results largely followed the same trend across countries; in these cases, each country is equally weighted and is not dependent on the number of respondents from a given country or its population size. We complemented the survey with 30 interviews with women and men whose seniority levels match those of the survey participants. We interviewed women and men from both Women4STEM Daring Circle partners as well as other companies in Europe. This survey follows a similar survey about how **women make it to the top in tech in the US.**

Boston Consulting Group and the Women4STEM Daring Circle, an initiative of the Women's Forum, developed a picture of the work environment for women in tech. We also studied what stakeholders can do to attract women to the industry and, once there, how to provide a supportive environment so they can thrive. This report is based on a survey of more than 1,500 women and men working in tech leadership across France, Germany, Italy and the UK as well as 30 in-depth interviews with tech leaders from our partner organisations and beyond. (See the sidebars "Survey Methodology" and "Women's Representation in Tech.")

Women's Representation in Tech

Technology roles are on the rise. According to **WEF**, technology- and digital-related roles will account for nine out of the ten most in-demand jobs by 2025. However, women are underrepresented in tech education, the tech industry, corporate tech functions, and especially in tech leadership.

- ***France:*** Nineteen percent of information and computer technology (ICT) graduates and 21% of ICT specialists are women.
- ***Germany:*** Twenty-one percent of ICT graduates and 19% of ICT specialists are women.
- ***Italy:*** Eighteen percent of ICT graduates and 16% of ICT specialists are women.
- ***UK:*** Twenty percent of ICT graduates and 17% of ICT specialists are women.

From our research, we learned that there are three significant similarities between the women and men who make it to the top in tech:

- They are equally ambitious. In fact, women are slightly more likely than men to say they will seek promotions in the next one to three years.
- They are equally comfortable taking risks or willing to take risks (such as applying for a position without meeting all the criteria) to advance their careers.
- Importantly, both men and women have a high level of technical or tech-adjacent expertise—although this does not mean that a STEM degree (science, technology, engineering, and mathematics) is necessarily required for a flourishing career in tech.

However, on their path to leadership, women surmount challenges that most men don't face:

- Many have caregiving responsibilities that result in longer leaves of absence.
- There are too few role models and peers to help support and guide them.
- Women perceive a greater pressure to prove their skills than men, in particular tech skills, which means women feel they have to work harder for the same recognition.

A key finding is that when making careers decisions, women tend to rely more on their support networks—such as recruiting firms, peers, mentors, sponsors, affiliation groups, and household members—while men are more likely to rely on their self-confidence in addition to their networks. Given this, organisations can help women build, nurture, and sustain these networks to support their careers in tech.

Let's go into more detail on our findings.

What Women and Men in Tech Leadership Have in Common

Equal Ambition. One of the primary goals of our research was to learn how women and men make it to the top in tech—and how their experiences are similar and different. Importantly, our findings definitively debunked the idea that women are not as ambitious as men. Across the countries we surveyed, senior women and men are equally motivated. There is no ambition gap. In fact, slightly more senior women than senior men said they are seeking promotions in the next one to three years (47% vs. 42%). Interestingly, after the age of 50, ambition tends to increase for women and decrease for men: more than half of the women surveyed, compared with a little more than one-third of the men, said that they are seeking promotions. This may be because their childcare responsibilities have lessened by this point in their lives, and they can refocus on their careers. BCG's research in the US has shown that many senior women who no longer have children at home fit this pattern and are eager to find new purpose and experiences at work.

Comfort with Risk. Senior men and women in technology agree that a willingness to take risks is critical for career advancement: 98% of surveyed men and 95% of surveyed women said that they feel very or somewhat comfortable taking risks, and more than 80% have applied for positions without meeting all the criteria. "I have a natural ability to take risks. Did I also make bad decisions? Of course! But I always learned something, which led me to where I am today," says Anju Sethi, who worked in the tech and gaming industries before joining Google as a director for recruiting and executive hiring. While not all senior women leaders are natural risk-takers, they have by necessity learned to be. "I am not a risk-taker by nature, but I have trained myself to be because I knew it was essential for my career," says Fiona O'Brien, vice president sales transformation and enablement, international markets at Lenovo.

Tech or Tech-Adjacent Expertise. In our survey, almost all the men and women agreed that strong tech and IT skills are important for early career advancement and to reach a senior role. When we dug deeper into this in our interviews, we learned that while many said that a STEM degree is very helpful for success and eventual leadership, it is not an absolute prerequisite for all technology careers (for example, those in tech sales). Simply being able to translate technical concepts for businesspeople is a highly valued skill. Learning the tech angle to any function—including legal, finance, marketing, and sales—can open doors to a career in the technology industry. "There are plenty of different roles in the IT industry that do not require you to be a computer scientist," says Irene Acedo-Rico, channel sales executive director EMEA at Lenovo, who studied business administration and law. "If you are open to learn and invest effort and time, you can learn everything you need to. The tech industry is full of opportunity."

Challenges Women in Tech Face

Caregiving. While there is plenty of agreement among men and women on what it takes to get to the top, the obstacles they face are different. Chief among these obstacles is the structural challenge associated with caregiving. By structural challenge, we mean a combination of persistent societal expectations and deeply interwoven corporate and government policies, such as those around granting longer parental leaves for women. For example, according to data from the Federal Statistical Office of Germany, in 2020, the average parental leave allowance was 3.7 months for men and 14.5 months for women. And of those on parental leave, three out of four were women.

Women are still the ones who usually step back from their careers to take care of children or elderly relatives. In fact, 60% of the women we surveyed (and 79% of the German women in our survey) have declined a role because they had caregiver responsibilities, versus only 45% of men. These women may have missed career advancement opportunities and may very well have reached their senior-level role—and level of compensation—earlier had they not declined these roles.

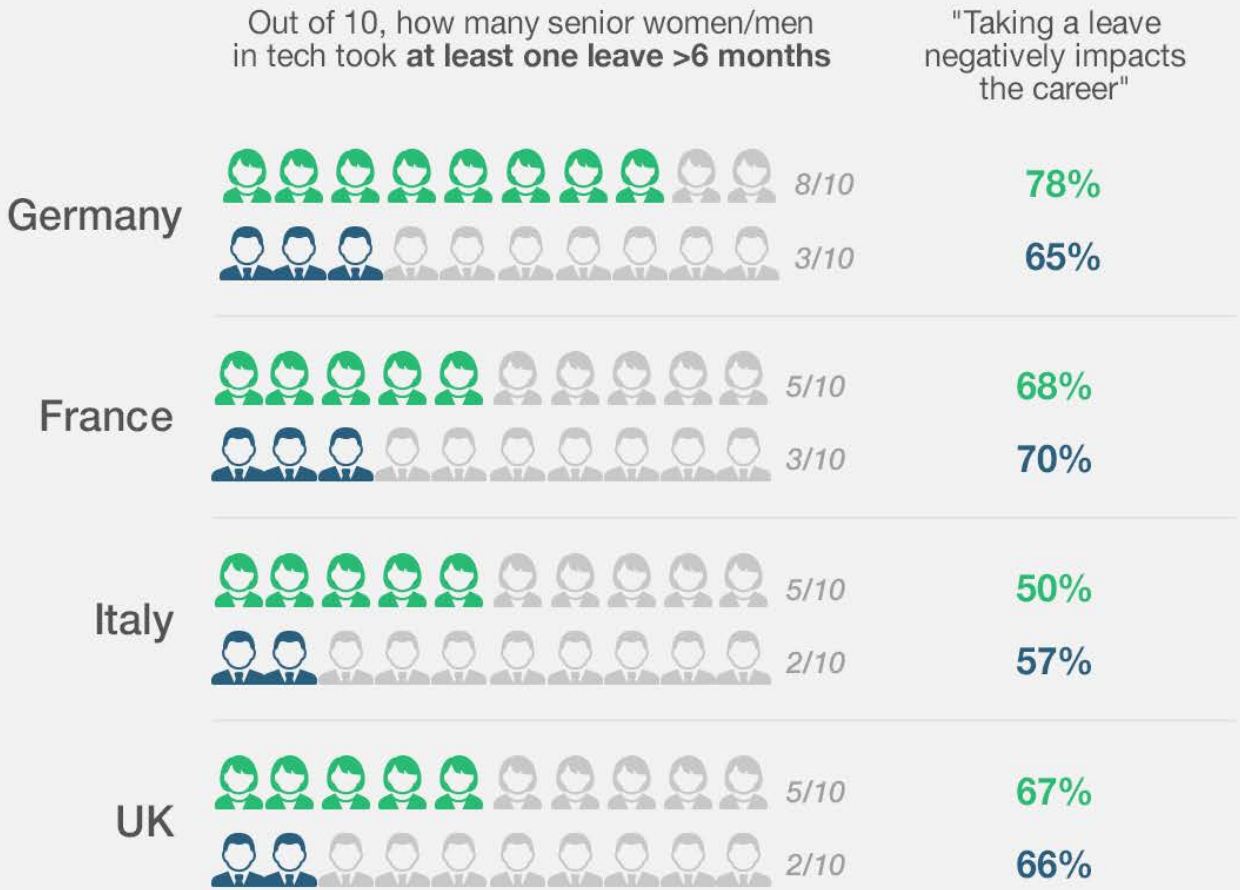
In addition, two-thirds of men and women believe that taking a leave of absence or working part-time hurts one's career or has hurt their career. Despite this, 80% of women took these flexible work options versus 50% of men. While the share of men who took a leave of less than six months is similar to the share of women (on average, 28%), women were much more likely to take longer breaks—and many women did so multiple times. (See Exhibit 1.)

Paradoxically, however, longer leaves (those of more than six months) seem to have a greater impact—both positive and negative—on men's careers. Almost 30% of men returned to a higher-level position (versus 15% of women), and 19% to a lower-level position (versus 14% of women). One possible explanation is that women are more likely to take parental leaves—which rarely lead to higher positions—while men take leaves for varying reasons, such as for more education or leaves between jobs, which more naturally lead to higher positions. "When I came back from maternity leave, my line manager tried to demote me. Thanks to my network, I had the courage to fight for my position and wasn't penalised for the leave," said one woman who leads a unit in a computer manufacturing company.

While longer leaves for caregiving rarely lead to higher positions, parents often say that taking the time to focus on their kids also helped them to develop leadership skills. "Before I went on maternity leave the first time, I cared more about myself. This changed when I became a mother. Motherhood evolved my empathy—it matured me and made me a better leader," says Carin Forsling, the mother of two and a managing director and partner at BCG, who focuses on technology.

Exhibit 1

Women are much more likely than men to take leave of more than 6 months—even though they think it has negative effects on their career



Source: BCG Senior Tech Leaders In Europe Survey, 2022

Few Women Peers. The fact that women in tech sometimes find that they are the only woman in the room also creates challenges. Women in interviews mentioned that they would have felt better supported had they had more women peers. In addition, being the only woman in the room can also lead to organizational challenges. One senior woman, for instance, mentioned that she was one of the first employees in her region to request maternity leave. “Many processes were just not in place yet, and I had to work through that with my company. None of my male colleagues had to do that,” she said.

Proving Themselves. Another challenge that many women cited is the need to prove their skills, especially tech skills, more than their men colleagues. While technology is a field where one can often objectively demonstrate skills, women said that they often struggle to get the same recognition and respect. As an example, some said it was not uncommon to hear sniping that their promotion was just because they were a woman. “From my experience, women in technology are very often better in what they do than men at the same level,” says Michael Nguyen, chief operating officer and former chief information officer of BNP Paribas Cardif. “This is probably because they have to demonstrate leadership skills by fighting the prejudice of being part of a minority in this field, while working much harder for the same level of recognition.” Not surprisingly, though, women who make it to the top generally learn to cope. “I was and am continuously underestimated by my colleagues, but I have learned to use it to my advantage. I like the moment when they understand that I know what I’m talking about,” says Lauren Kisser, director of Alexa AI at Amazon.

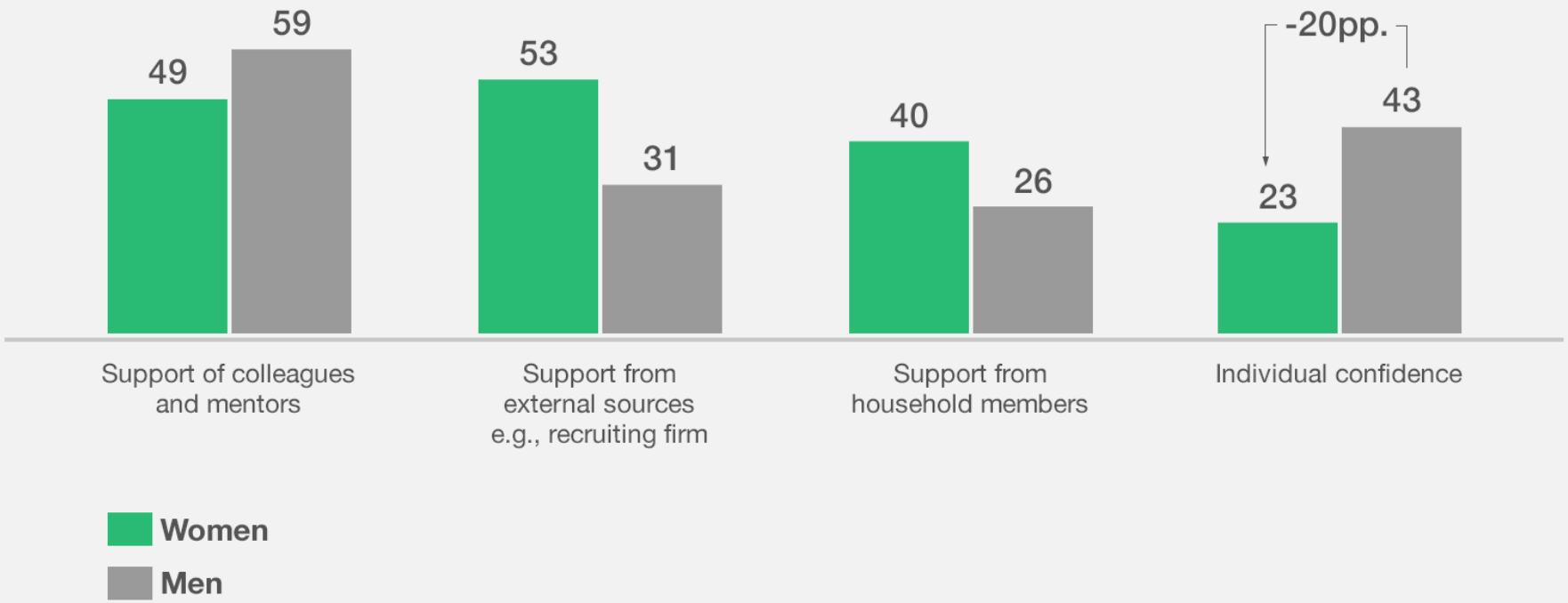
Support Ecosystems Build Confidence for Career Advancement

Both men and women mentioned the importance of their support networks in getting ahead in their careers. Significantly, however, men rely to a far greater extent on their own individual confidence to get ahead. Indeed, men were, on average, almost twice as likely as women to rely on their individual confidence in asking for a promotion for which they didn’t necessarily fulfil all the requirements. In contrast, women were much more likely to seek support and encouragement from external sources, such as recruiting firms. Emma Maslen, angel investor and former general manager at the software company Ping Identity, puts it this way: “We women doubt our capability unless someone says we can do something. Even a risk-taker such as myself sometimes needs a push.” This shows the importance of a support ecosystem made up of mentors, sponsors, coaches, peer networks, supportive spouses, authentic role models, and others. (See Exhibit 2.)

Exhibit 2

Men rely on their individual confidence and support from colleagues/mentors more than women do

Q: Which factors made you feel comfortable pursuing a promotion without meeting all of the position qualifications?



Source: BCG Senior Tech Leaders In Europe Survey, 2022

Over time, men's confidence in their own abilities can contribute to more job changes and broader experience—all of which opens doors. For example, while 50% to 70% of tech leaders—women and men across the countries we surveyed—said that to move up, you need to move on, women in France, Italy, and the UK tend to switch employers less often than men do, and the gender gap is especially large in the UK. (See Exhibit 3.) Moreover, when women do switch roles, they are more likely to stay in their current functional area (55% stayed in a similar function versus 39% of men). This limits how much these new positions broaden their experience and skills and improve their future candidacy for senior roles, which often favour those with broad experience. Our survey found that twice as many men as women had roles across a number of functions. (See the sidebar 3 "Has the Pandemic Changed Expectations for Working Abroad?")

Exhibit 3

Women switch employers less often than their men peers – especially in the UK

Source: BCG Senior Tech Leaders In Europe Survey, 2022

Has the Pandemic Changed Expectations for Working Abroad?

Switching roles and broadening one's experience often includes moving abroad for a job, something half of senior men and women have done (except for survey participants in Germany, where 75% of women, compared with 56% of men, have moved abroad). Of those men and women who have moved abroad for a job, most (from 60% to 74%, depending on the country and gender) said it was very critical for advancement. Almost all other respondents said it was helpful, but not required.

Interestingly, the pandemic has changed the perceptions of working abroad. About 80% women said moving abroad is less critical now because virtual teaming enables an international experience, although only 60% of men said the same thing. This may pose a risk for women in the future if decision makers, who are mostly men, continue to favour those for promotion who have experience working internationally and living in another culture.

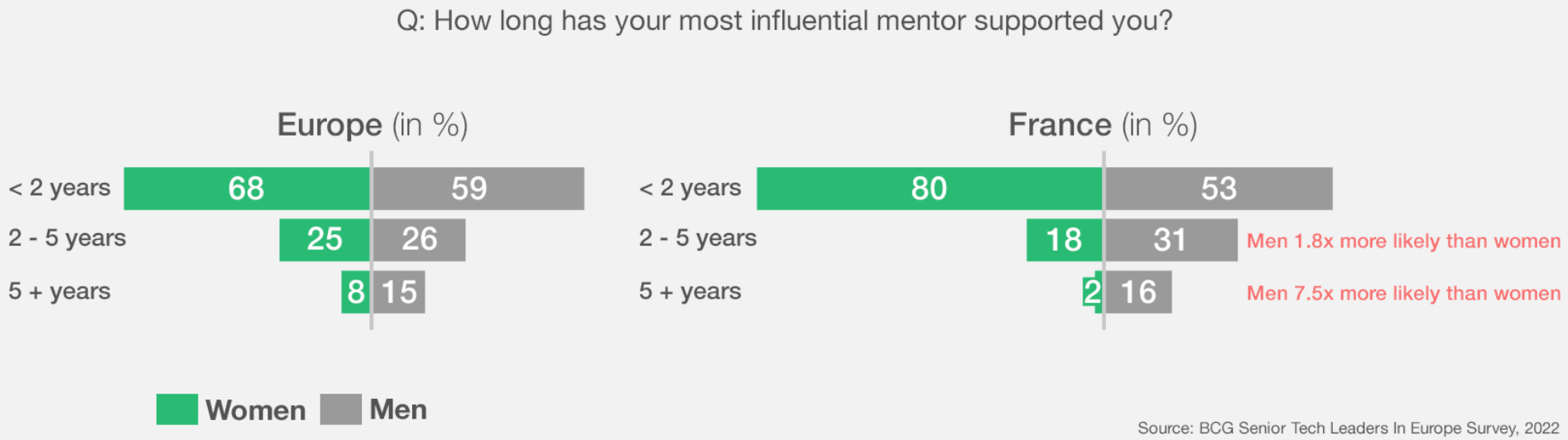
1 Eurostat data as per 2021 for France, Germany, Italy; 2019 for the UK

Line Managers. In our survey, both women and men cited line manager support as the most crucial element leading to career advancement. Line managers have the most direct interactions with their employees, are the most familiar with their strengths, and are thus in an ideal position to support them. Women in our survey considered their first two promotions as the most pivotal in their careers, while men did not cite any one promotion as more important than another. In interviews, women said that their manager's support and encouragement to make their first job shift, especially into their first line manager role, helped their career trajectory toward a leadership role. Gwen Coble, executive director smart solutions at Lenovo EMEA, puts it this way: "I have been fortunate to have direct managers who have been huge advocates from the beginning and throughout my career. Having supportive managers, both the direct manager and the next level, was really critical for my success."

Mentors and Sponsors. Beyond line managers, both women and men benefit from formal and informal mentors as well as sponsors. On average, 57% of men and women in our survey have or have had at least one career mentor. Of those who had one, 84% of the women and 83% of the men said that they wouldn't be in their current position without that guidance. Men are more likely to stay connected with mentors longer: 15% (versus only 8% of women) said that their relationship lasted five or more years. The biggest difference was in France, where 80% of women had their mentor's support for fewer than two years versus 53% of men. (See Exhibit 4.) Given the importance that long-term mentorships can play in future job opportunities, this differential can be significant.

Exhibit 4

Men have longer mentor relationships—in France they are 7.5x more likely than women to stay in touch with mentors for more than 5 years



Source: BCG Senior Tech Leaders In Europe Survey, 2022

Although mentorships generally are very important, most of the women we interviewed agreed that informal mentor relationships that develop organically, often based on work interactions, and benefit from strong personal chemistry, are more impactful than formal ones. Many interviewees mentioned that the ideal mentorship goes beyond giving advice and evolves into sponsorship, where a more senior person takes on an even more influential role by actively advocating for a person's career.

The women we interviewed also agreed that women need to actively seek out and nurture potential mentors or sponsors given the value of these relationships—even if they are uncomfortable doing so. "My big break came when I wrote to a senior partner and told him about my passion area. Nothing happened right away, but for two years he coached me actively, asking me: What do I

want? What's my view of the world? How do I truly build a trusted relationship with my client? This gave me the confidence boost I needed and moved me from being a doer to being a leader. Everyone needs a person like that in their career—to encourage you to take that leap," says Saba Arab, managing director of digital business transformation at Publicis Sapient.

Companies can complement these organic mentor and sponsor relationships with formal programs to ensure that women have mentors and sponsors, regardless of whether they develop them organically. An interviewee who is now a director in a major tech firm said, "When I was more junior, I found it difficult to find a mentor. I admired people from a distance but did not find a good way to connect. A formal program would have helped by reducing the barrier to proactively reaching out to potential mentors." Our interviewees said that men and women were equally valuable as mentors, although some women acknowledged that they were more open to discussing personal matters with women mentors.

Role Models. Ninety percent of women and 85% of men said that authentic, senior role models are essential to career progression because they help younger employees visualise a feasible path to leadership. "Ten years ago, I would have said it's just about women role models. Now I believe it's about [women] role models who haven't played the 'male game' to reach the top. Getting to the top is not about sacrificing family life," says Anju Sethi. Despite the underrepresentation of women in tech, a surprising number of women have found women role models. In the UK, 85% said they have a senior woman as a role model, compared with 80% in France, 65% in Germany, and 60% in Italy.

All of this shows the importance of a strong network for women as they rise through the ranks—and how valuable it is for companies to encourage women to establish and nurture these networks throughout their careers. Lauren Kisser summarises the role others have played in her career as follows: "I learned about almost all of my positions through my network. This doesn't mean you are in a passive role, though, it's in your hands to create your own opportunities by nurturing your network."

What You Can Do

Recommendations for senior leadership

To encourage women on their paths to tech leadership, corporate leaders must take action both organisationally and as individuals. First, a leadership team should commit to increasing the representation of women in tech generally. As mentioned earlier, a STEM degree is not a prerequisite for a career in tech, but it helps to foster a passion for tech and a path to leadership early on. Tech companies should endeavour to hire men and women equally in functional areas where having a STEM degree is not necessarily needed. In this way, they can increase the overall representation of women and women's role models in the company.

In addition, senior leaders should strive to increase the number of women with STEM degrees. Across 35 European countries, fewer than one in five computer science graduates are women. Companies can, for example, support nonprofit organisations that offer computer science classes to girls, such as Girls Who Code, to spark their interest in tech careers. Companies can also engage with academic institutions to attract women early on by demystifying tech careers and highlighting the positive impact that tech can have on humankind—an outcome that is particularly important to women. This engagement to attract women to tech early could include funding tech fellowships and scholarships, as well as establishing a robust internship program to expand the recruiting pipeline.

Once women are in a company, leadership needs to lay the groundwork for retaining and promoting women by investing in programs—such as formal affiliation networks, sponsorship programs, company-sponsored coaching, and mentoring initiatives tailored to women's individual needs—to build a support ecosystem. And since mobility across disciplines is important for advancements in tech, leadership needs to make sure that women get broad experience. For example, companies should create rotational leadership programs to ensure women receive substantive exposure to various tech functions and disciplines, and they should encourage women to participate in these programs. In addition, offering training in tech skills and providing ongoing upskilling is essential and should be considered particularly when women are returning from extended caregiving leaves.

The leadership team also needs to set the tone on inclusivity by promoting inclusive ways of working and flexibility, and making caregiver support a priority—for men and women. It is not sufficient to talk the talk, leadership also needs to walk the walk by supporting these programs with tangible resources: dedicated employees—from both HR and diversity, equity, and inclusion (DEI) teams—as well as the budget needed to ensure operational support of these programs.

On an individual level, all senior leaders, both women and men, should strive to be authentic role models who bring their full selves to work and reveal their humanity. Over the course of our interviews, we heard repeatedly that women and men value hearing about the life stories— including the successes and failures—of their role models, mentors, and sponsors.

As mentioned, companies should publicly endorse a mentoring program for women and senior leaders must commit to be sponsors for women themselves. According to our survey, 70% of men said that their most influential mentors were men, while women's most influential mentors were more diverse (39% were women, 33% were men, and 28% were mixed or nonbinary). We recommend diversifying sponsors and mentors for men and women to lay the foundation for more inclusive attitudes and a more diversified organisation. When selecting mentees, it's important to ensure that everyone has the opportunity to be mentored by casting a wide net beyond the most high-profile employees or those specifically asking for a mentor.

Recommendations for line managers

Line managers should be mindful that early support is essential for women. As noted previously, we found that first promotions are most important for women, especially for enhancing confidence and setting the right career trajectory. As one interviewee says: “People see something in you and tell you, and this is when you start to believe it. Just one comment can make a difference.” Line managers should express support and encourage women to go for the stretch roles. Managers can help destigmatise failure and encourage risk-taking by sharing their own mistakes and the critical ways those mistakes shaped their careers. It’s also vital to advocate for women behind closed doors, appropriately amplifying their accomplishments.

Importantly, companies and managers must adopt flexible work models, and they must ensure that employees feel empowered to work part-time and take leaves, that their choices are respected, and that they are not penalised if they do choose to make use of these options.
“When I became pregnant, I was concerned about taking maternity leave. Like many I thought it would hamper my professional development, and I felt getting back to work quickly would improve my career opportunities,” says Kamini Aisola, who joined Amazon Web Services (AWS) in 2012, and was one of the few women on the sales team at that time. “I was fortunate that I was able to sit down with my manager, and the leadership team to discuss my goals and long-term career aspirations. This gave me the ability to take time-off and focus on my family, confident in knowing that I was coming back to an exciting job.” Fast forward a decade, Aisola is now a managing director and leads the EMEA Segments and Acceleration Programs at AWS. Normalizing flexibility not only helps women and men who are caregivers but also ultimately benefits all employees who for any reason do not work full-time on a standard schedule in the office. Workplace practices need to be equitable, and that means ensuring that anyone who works at home or has caregiving responsibilities is considered for promotions, stretch assignments, and opportunities to work abroad. Instead of making assumptions about women’s situations, line managers should schedule regular conversations about their ambitions and goals, which will change over time, as their personal situations do.

Just as with senior leaders, line managers should strive to be authentic role models, demonstrate inclusive behaviour, and commit to mentoring women either through the company’s formal programs or on an informal basis.

Recommendations for HR and DEI managers

Almost 40% of those surveyed said that their company does not have DEI programs to increase gender diversity in leadership. And of those surveyed who said their company has DEI programs, 21% of women and 27% of men said that they aren't effective. The net result is that fewer than half of respondents' companies have a DEI program in place that is working effectively. Despite this, there are many ways that HR and DEI managers can attract and hire women, improve their day-to-day experience, and ultimately improve gender diversity in tech leadership. A few examples include:

- During the recruiting process and after women have been hired, highlight the variety of possible tech career paths beyond data science, including such areas as sales and product management. Disseminate information about these jobs (as well as for deep tech positions) in a variety of ways, including pamphlets, websites, newsletters, and panel discussions. Use visuals that show diversity—including employees of different genders, ethnicities, and ages, and those with disabilities. Avoid using words that research has shown appeal mostly to men, including competitive, fearless, and dominate.

- Keep job qualification requirements broad and flexible to encourage women to apply. Hiring decisions should be based on whether a candidate has the aptitudes and capabilities to accomplish the job, not on the résumés of people who have filled the job in the past.

- Create an ongoing, in-house learning curriculum that is tailored to women's learning styles and that supports external training for skill building. Last year's report of the Women4STEM Daring Circle showed, for example, that women in STEM prefer fewer and longer training sessions, rather than more sessions that are spread out and shorter. And women put a premium on learning skills that are directly applicable to their work and that enable them to make a positive impact on the world.

- Hire and retain senior women to serve as role models, and find ways to highlight their career paths, their accomplishments, and how they integrate their work and private life.

- Institute a returners program to attract experienced, ambitious women who may have left the workforce to raise children.
- Create and strengthen support networks for women by implementing formal sponsorship and mentoring programs, offering coaching, and organizing affiliation networks or communities so that women can connect with one another. There are various mentorship software tools to simplify the organisation of these programs.

- Improve caregiver support by offering a variety of benefits to meet employees' needs. The benefits should include support for everyday care and emergency care, financial support, and being flexible about when, where, and how much employees work. Ensure that this support is gender neutral, that options are used by men as well, and that advancement is not hindered for those who take advantage of these options.

- Encourage employees to move and accept new positions by broadening the support offered to spouses. Such support could include helping spouses find new positions (for example, by engaging a headhunter). "One of my breakthrough moments was when I took on an international role and moved to the US with my family following me. Growth comes from moving. But to be clear, family stress comes from moving as well," says Carina Solsona, global engineering associate director at Procter & Gamble Chemicals and a mother of three. "Supporting a spouse's employment can remove a significant barrier to taking a new post, particularly internationally," she concludes.

- Keep in mind that employees' needs change over time. Younger, eager women at the start of their careers will need programs to keep them challenged and inspired. Executives who are mothers may need flexibility and connection with peers in a similar work-life situation. And older women who are returning to the workforce may need upskilling and more extensive onboarding before starting a new position.

Recommendations for women

Women should make their ambitions known and discuss their goals explicitly with their managers and mentors. They should raise their hand for advancement opportunities, take risks, and go for the stretch role. “Choose roles that are half a shoe size too big—this ensures that you grow but don’t burn out,” advises Julia Wiesermann, a managing director at BCG Platinion, BCG’s digital transformation group.

“I was always driven by purpose and the desire to innovate and wondered what we could do differently on the sustainability side to drive us to have a concrete positive impact,” says Ariane Thomas, who was L’Oréal’s first head of environment and is now the group’s first global tech and sustainability director. “The answer included resource efficiency, energy efficiency and dealing with waste management. All of this is very complex and very technical. I had to engage various teams and I had to fight to be heard. But for the impact our group can have, it was 100% worth it.”

While companies have a role to play in building support ecosystems for women, women should also proactively build networks by looking for mentors internally and externally—and investing the time to grow and keep those relationships. They should join women-in-tech communities and build an internal and external peer network. All these relationships can lead to new job opportunities and serve as a sounding board for those opportunities—especially when uncertain about one’s qualifications. “Almost every opportunity I had came through my network. Peer networks are important because when they move on, they take you with them,” says Kathleen Moore, former global head of data transformation at HSBC.

It’s also important that women demand the support they need—and switch jobs if they aren’t getting it. “If I look at my career, the big steps have happened thanks to the leaders and the trust they had in me,” said one senior woman at a tech hardware company during our interview. “If your manager is not supportive, you need to make a choice and move. One of the reasons why I might not have had barriers as much as other women is that I have consciously chosen who I work for.”

And women should look to authentic role models as sources of strength to be true to themselves—which can help them bring the best to their jobs—while always balancing the need to stretch and push themselves beyond their comfort zones. “One of the factors that contributed to my success was that I did not try to fit in all the time. And, in fact, those who do not fit in a box can actually add the most innovation,” says Darshana Thakker, principal IT architect at BCG Platinion.

Our survey found many similarities among senior leaders in tech regardless of their gender, but there are notable differences. When women and their companies are aware of these differences, they can be used to help accelerate career trajectories. In fact, women's reliance on a web of overlapping networks can be a source of considerable strength. Through committed action, companies can increase the number of women across all levels, purposefully helping them to realise their full potential and, ultimately, creating a more balanced and valuable leadership team.

About the Women4STEM Daring Circle

The Women4STEM Daring Circle aims to increase the representation, leadership, and impact of women with STEM skills at all stages of the pipeline from schools to boardrooms. And, to highlight the strong connection between STEM skills, access to high quality jobs and the potential for positive societal impact which we believe is a powerful lever for attraction and retention of talent.

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