WOMEN IN STEM

How and why an inclusive strategy is critical to closing the STEM talent gap

Key Global Workforce Insights from Kelly Services.
How to attract STEM women in APAC

Even with work-life balance being a top priority, STEM women in APAC are primarily attracted to employers that will develop them and their careers, as indicated by the pink shading of attraction factors.

STEM Women in APAC rate top 8 attraction factors by level of position, by percentage

<table>
<thead>
<tr>
<th>STEM WOMEN APAC AVERAGE</th>
<th>ENTRY LEVEL</th>
<th>SPECIALIST</th>
<th>MID-MANAGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Salary/benefits</td>
<td>86%</td>
<td>Salary/benefits</td>
<td>87%</td>
</tr>
<tr>
<td>2 Work-life balance</td>
<td>78%</td>
<td>Career advancement</td>
<td>77%</td>
</tr>
<tr>
<td>3 Flexible work</td>
<td>69%</td>
<td>Training/dev. programs</td>
<td>66%</td>
</tr>
<tr>
<td>4 Career advancement</td>
<td>68%</td>
<td>Work/life balance</td>
<td>64%</td>
</tr>
<tr>
<td>5 Training/dev. programs</td>
<td>66%</td>
<td>Flexible work arrangements</td>
<td>65%</td>
</tr>
<tr>
<td>6 Knowledgeable colleagues</td>
<td>55%</td>
<td>Knowledgeable colleagues</td>
<td>54%</td>
</tr>
<tr>
<td>7 Environmentally friendly practices</td>
<td>53%</td>
<td>Environmentally friendly practices</td>
<td>55%</td>
</tr>
<tr>
<td>8 Innovative projects</td>
<td>52%</td>
<td>Exposure to latest technology</td>
<td>50%</td>
</tr>
</tbody>
</table>

Factors that are career development-based

Factors that are values-based

Breaking down the confidence gap

Data from the most recent KGWI research confirms a startling confidence gap: women in STEM APAC jobs are not as confident as their male counterparts.

45% of STEM women in APAC agree/strongly agree they are in a position of high demand.

59% of STEM men in APAC agree/strongly agree they are in a position of high demand.

STEM women respondent ratings compared to their male counterparts.

*Table represents relative % who strongly agree/agree with the statement

In addition to analyzing worker preferences and psychographic insights based on survey data from the 2015 and 2014 Kelly Global Workforce Index™ (KGWI), this study pulls insights from Kelly® Free Agent Research (2015) survey data and other research sources.

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Introduction

If we’re going to make a dent in the massive talent gap in the STEM fields, we have to start engaging more women now, and we have to work together to do so.

Tipping the scale towards a more optimized and gender diverse STEM talent pool takes more than just ramping up recruitment efforts—it requires commitment and effort from all parties involved, from parents and teachers all the way up to executive leadership in the world’s leading STEM companies.

To begin closing the talent gap, we must create an inclusive environment that facilitates greater engagement and retention of females in STEM. We must make it a priority to eliminate bias and barriers, to deliver top-down support and institutional accountability. We have to focus on providing greater mentorship for women in STEM, and increasingly raise diversity scores—because there’s a lot at stake—not just for your company, but for the future of the STEM industry.

As a pioneer in the staffing industry, and in the study of workforce preferences, Kelly Services takes a high-level look at the need to address women in STEM, as well as the factors that play a role in successfully engaging them for long term benefit to your organization.

In addition to analyzing worker preferences and psychographic insights based on survey data from the 2015 and 2014 Kelly Global Workforce Index™ (KGWI), this report pulls insights from Kelly Free Agent Research (2015) survey data as well as secondary research sources. Unless otherwise noted, all statistics come from recent Kelly workforce research data.

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The STEM fields are projected to be short 230,000 employees as early as 2018. But, by simply reducing female attrition in the U.S. by 25 percent, that shortage could be decreased to just 10,000 employees.
The need for STEM talent is massive.

Retention numbers for women in STEM fields aren’t pretty, but improving them offers multiple opportunities and benefits to employers.

**Preventing or filling key skill gaps**

Simply reducing attrition in the U.S. by one quarter would add 220,000 workers to the STEM talent pool.\(^2\) In this *virtuous circle*, retention drives recruitment, which creates momentum and scale—boosting further retention.

**Increasing innovation and new product development**

In a study of more than 100 teams at 21 companies, teams with an equal number of women and men were more likely than teams of any other composition to experiment, be creative, share knowledge, and fulfill tasks.\(^4\)

Women influence more than 85 percent of brand decisions, on average. In those industries that rely heavily on STEM talent—such as automotive, pharmaceuticals and consumer-packaged goods industries—female purchasers exert even greater influence. For instance, women make 93 percent of over-the-counter pharmaceutical purchases.\(^5\) Forward-looking firms are the ones actively involving women in product design—and thought leaders have noted that re-balancing the male-dominated professions of design and engineering would go a long way toward creating products and services that resonate with women.\(^6,7\)

“If women and members of other traditionally underrepresented groups joined the STEM workforce in proportion to their representation in the overall labor force, the shortage of STEM professionals would disappear.”

— Mina Stewart, Verizon\(^8\)

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**STEM supply and demand**

- **16%**

  The projected increase between 2010 and 2020 of STEM-related employment to more than 8.5 million jobs\(^6\)

- **80%**

  of the fastest growing U.S. occupations require mastery of mathematics, and scientific knowledge and skills\(^9\)

- **230,000**

  The number of STEM employees the U.S. will be short as early as 2018\(^1\)

- **25%**

  of STEM-related jobs are held by women, though they represent roughly half of the U.S. workforce.\(^8\)
Improving financial performance by reducing turnover and absenteeism

Hidden biases and barriers cost corporations $64 billion per year in turnover, by one estimate. Studies correlate the presence of women in higher management to both higher return on equity and total return to shareholders. Intangible benefits of having more women in leadership include an enhanced company reputation, which in turn lowers the cost of recruiting new talent.

Enhancing corporate reputation

Corporations are under increasing pressure to regularly report on, and improve, their diversity statistics. Tech firms are under particular pressure. These firms can generate positive press and enhance their employer brand by clearly communicating that they value diversity, creating stretch goals, and by demonstrating continuous progress towards meeting these goals.

Those who are lackadaisical about diversity can face a PR nightmare; just one verbal slip by an executive can create enormous damage, both externally and internally. In Fall 2014, a storm of criticism was heaped upon Microsoft® Chief Executive Satya Nadella when he said women should not ask for raises and instead rely on “karma” for advancement.

“There is ample research showing that diversity in leadership leads to better results ranging from creativity and innovation, to the bottom line.”

— Trish Foster, program director for The Center for Women and Business at Bentley University.

Note: While all statistics in this section are for the U.S., the gender gap exists, to varying degrees, globally. See global insights on p.11

Retention numbers for women in STEM

41% of women leave tech companies after 10 years of experience, compared to only 17% of men.

56% of women in technology leave at the mid-level point (10 – 20 years into their careers), twice the rate of men.
WHY WOMEN DROP OUT OF STEM CAREERS, AND WHEN

From a lack of support to feelings of exclusion, women in STEM face an abundance of challenges across the career arc, making them more at risk for dropping out of the field.
A lack of female role models and mentoring, gender stereotyping, less family-friendly flexibility in the STEM fields and an overwhelmingly male-centered culture are all barriers to women in STEM careers that organizations will need to address.

All along their STEM career spectrum, women continue to face feelings of inadequacy and not fitting in. They often experience:

“Social identity threat” – feeling isolated or like a misfit, as if they don’t belong because of their gender.

“Imposter syndrome” – feeling as if their success is a fluke and not driven by real ability, despite their objectively good performance.14

Nilanjana Dasgupta, PhD, Director of Faculty Equity and Inclusion at the University of Massachusetts, Amherst has called for more exposure to female peers, mentors, and executive leaders as a “social vaccine” against these self-limiting beliefs. “Women who are talented in math and science may drop out of STEM because they believe, either consciously or unconsciously, that they don’t belong in it,” she said.14

Where women face challenges along the STEM career arc

High school and college
At risk due to mindset and lack of role models
Among high school students, a fewer percentage of girls are interested in pursuing STEM careers than boys.15

And in college, the trend continues. Women hold a disproportionately low share of most STEM undergraduate degrees, earning just 20 percent of engineering degrees in 2014.16 One study found that 40 percent of female chemists and chemical engineers were discouraged from pursuing science, most by their college professors.17

High school students interested in pursuing STEM careers, by percent of graduating class:15
Women who stay in STEM jobs will face a pay gap, albeit smaller than the pay gap in non-STEM jobs.

Women in computing make 87 percent of what their male counterparts earn, while women in engineering roles make 82 percent of their male counterparts’ earnings.

Early career
At risk due to lack of support
Women with STEM degrees are less likely than their male counterparts to work in a STEM occupation; they are more likely to work in education or healthcare. In fact, only 11 percent of practicing engineers are women, and of all professional computing occupations in the U.S., only 26 percent are held by women.

Mid-career
At risk following motherhood and/or due to lack of career growth expectations
Women tend to drop out of the workforce at key life phases, most notably around childbearing years and then again at mid-management levels, where their networks and peer ranks start to thin. In the U.S., 50 percent of women drop out of STEM positions in the first 10 years.

Established career
At risk due to isolation and exclusion
Women find themselves with few female peers in high-level leadership positions. Technology firms, in particular, have come under fire for lack of gender diversity, especially at the top.

- 6% of CIOs are women
- 12% of CEOs in biotech/pharma are women
- 4% of CEOs in healthcare are women

NOTE: While all statistics in this section are for the United States, the gender gap exists, to varying degrees, globally. See global insights on p. 11.
EXPLORING THE STEM GENDER GAP ACROSS THE GLOBE

The gender gap isn’t limited to the United States. Whether due to gender bias or a feeling of “being stalled,” women across the world are more likely to leave their STEM career than men.
Globally, women in STEM jobs are highly ambitious and driven, but gender bias and hostile work cultures are leading them to feel stalled in their careers and more likely than their male peers to leave their positions within the coming year.

**Likely to quit**
In the U.S., women in STEM fields are 45 percent more likely than their male peers to quit their jobs within the year, and similar gaps exist in other countries. This is despite the vast majority of these women reporting that they are driven by meaning and purpose in their careers, and would love to continue doing what they’re doing.24

**Feel excluded and unwelcome**
Male-dominated cultures are a primary driver of dissatisfaction, making women feel left out and unwelcome. The cultural issues vary by STEM discipline: a “lab-coat culture” in science glorifies extreme hours spent toiling over experiments and penalizes people who need flexibility around childcare; the pervasive maleness of engineering’s “hard-hat culture” causes women to dress to avoid harassment; and tech’s “geek workplace culture” has been compared to a super competitive nerd fraternity.24

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**STEM women report having experienced:**

<table>
<thead>
<tr>
<th>Culture Type</th>
<th>U.S.</th>
<th>Brazil</th>
<th>China</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid, protocol-driven lab culture</td>
<td>20%</td>
<td>40%</td>
<td>26%</td>
<td>50%</td>
</tr>
<tr>
<td>Testosterone-laced hard hat culture</td>
<td>25%</td>
<td>35%</td>
<td>35%</td>
<td>22%</td>
</tr>
<tr>
<td>Late-night geek/hacking culture</td>
<td>31%</td>
<td>35%</td>
<td>21%</td>
<td>59%</td>
</tr>
</tbody>
</table>

**Women in STEM feel gender bias is pervasive**

<table>
<thead>
<tr>
<th>Bias Type</th>
<th>U.S.</th>
<th>Brazil</th>
<th>China</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coworkers believe men have a genetic advantage in math and science</td>
<td>50%</td>
<td>54%</td>
<td>54%</td>
<td>54%</td>
</tr>
<tr>
<td>See double standards in training opportunities for female employees</td>
<td>50%</td>
<td>64%</td>
<td>70%</td>
<td>77%</td>
</tr>
<tr>
<td>Perceive bias in performance evaluations</td>
<td>22%</td>
<td>72%</td>
<td>68%</td>
<td>81%</td>
</tr>
</tbody>
</table>

**Even senior-level women are pessimistic**

<table>
<thead>
<tr>
<th>Pessimism</th>
<th>U.S.</th>
<th>Brazil</th>
<th>China</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>A female at my company would never get a top position no matter how able or high-performing</td>
<td>44%</td>
<td>33%</td>
<td>57%</td>
<td>66%</td>
</tr>
</tbody>
</table>

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NOTE: The data and graphics presented on this page are from Center for Talent Innovation, as reported in the Harvard Business Review.
European Union

According to BUSINESSEUROPE, “The lack of STEM-skilled labor will be one of the main obstacles to economic growth in the coming years.”

The EU Commission says that by 2020, Europe will lack 900,000 IT professionals—the equivalent of Stockholm’s population. More than 10,100 ICT (information and communication technology) practitioners are currently lacking in Italy, 18,300 in Poland, 41,800 in Spain, and 87,800 in Germany.

In 2012, 12.6 percent of female university graduates majored in STEM-related subjects versus 37.5 percent of male graduates.

Only 24 percent of science and engineering professionals are women, and only 15 percent of science and engineering associate professionals are women.

In 2013, women made up only seven percent of the UK’s Royal Society fellows, a body for the most eminent scientists, engineers, and technologists.

As of October 2014, the average share of women on the boards of the largest publicly listed companies across the EU had reached 20.2 percent—an increase of more than eight percentage points since October 2010, when the European Commission first put the issue of women on boards high on the political agenda.

Since 2013, the European Commission has been considering a directive that would force publicly listed companies to allocate 40 percent of their board seats to women. In early 2015, Germany passed a law mandating that its biggest public companies, including Bayer, BMW, Merck, and Volkswagen, give 30 percent of their board seats to women by the beginning of 2016.

These findings deliver insights into the talent gap for women in STEM in the Asia-Pacific (APAC) region and in Europe, the Middle East, and Africa (EMEA).
China

With a high percentage of women in leadership, e-commerce giant Alibaba.com is an anomaly. Alibaba Group boasts nine female partners out of 27, including its CFO, Chief Customer Officer, and COO of its logistics business. Credit has been given to the company’s culture, which stressed diversity and showcased female leaders from the start—with six of these women having been present at the company’s inception or joining within the first two years.\(^{34}\)

For STEM women overall, the numbers are less rosy. Even though 90 percent of STEM women feel “driven by meaning and purpose” in their work, 30 percent say they are likely to leave their job within the year.\(^{34}\)

India

Women have been closing the higher education STEM gap in IT (40.2 percent of IT and computer degrees in 2012 – 2013), but still lag in engineering (28.5 percent). Women represent 46 percent of all enrolled undergraduate students.\(^{35}\)

India faces a sharp drop-off of women at mid-career level. The most significant driver is the “double-burden syndrome” of women struggling to balance work and family in a culture where both women and men feel family and household duties are primarily the woman’s responsibility.\(^{36}\)

As a result, there are few women left to fill roles at the top. Despite a six-month extension, as of early 2015, 12 percent of publicly traded companies failed to meet a mandate that they have at least one woman on their board, while 53 percent met the directive by appointing directors that could not be considered independent (many were wives or sisters of executives). Of the 50 companies in the NIFTY index, only five had two female directors—and five had three female directors on boards that varied in size from seven to 17 members.\(^{37}\)

Australia

Approximately 44 percent of employers continue to experience difficulties recruiting STEM talent, and the gap will likely widen as STEM-related jobs are the fastest-growing, yet enrollment in STEM-related disciplines in higher education is in decline for both genders in absolute terms and in comparison with other comparable nations.\(^{38}\)

In 2011, only 33 percent of higher education STEM-related degrees went to women.\(^{39}\)

Only 28 percent of workers in STEM fields requiring a higher education degree were women, compared to 55 percent of the overall higher education workforce. The ratio was much lower in engineering (15 percent) and information technology (25 percent). With 47 percent of positions held by women, the gender gap was the smallest in the natural and physical sciences.\(^{40}\)
ADDRESSING THE CHALLENGE OF RETAINING WOMEN IN STEM

To increase female retention numbers, STEM employers must take a top-down, multi-pronged approach in creating a more attractive and supportive environment for women.
It takes a multi-pronged approach to create meaningful, lasting changes in the retention of women in STEM fields. One-off programs are insufficient.

A study referenced by the National Center for Women & Information Technology of 700 corporations found that the most effective strategy for increasing diversity was to create diversity councils and hold executive leadership responsible for meeting specific goals. This strategy increased the odds of holding a leadership position by 19 percent for white women and 27 percent for black women. McKinsey & Company research found a positive correlation at Fortune 1000® firms between representation of women on boards and women in executive roles.

Supervisors exert the greatest direct influence on initiatives for change, so critical training is focused on improving the supervisory relationship by fostering understanding, acceptance, and genuine support.

Support for competing responsibilities
Flex-time and other family-friendly policies are critical, but must be offered to all employees, not just women. And, most critically, taking advantage of flexible arrangements must be actively encouraged and even modeled by both direct managers and senior leadership.

Initiatives that support only women or other underrepresented groups can be counterproductive, as those employees may hesitate to participate for fear of being further marginalized.

• Make work-life design elements, such as flexible schedules, the norm
• Make it easier for employees to take time off from work and to return
• Provide extended parental leave options to both women and men

NOTE: Baseline framework was created by NCWIT; framework updated and expanded with KGWI data and other insight gathered by market intelligence. https://www.ncwit.org/resources/women-it-facts-infographic-2015-update

Globally, a greater percentage women value flextime than men.

58%
of women in STEM fields are attracted to a company that offers flextime.

50%
of men in STEM fields are attracted to a company that offers flextime.
Formal peer support programs
Employee resource groups (ERGs) such as a Women’s Forum or Working Parents Connection are valuable tools to help women feel they truly belong in STEM fields. Best practices include an executive sponsor for each ERG. Learning communities around patenting or innovation can also provide networks, support, role models, and professional development.

Performance evaluation and promotion
- Clearly articulate measurable steps for promotion
- Value mentoring and employee development as a performance evaluation or promotion criteria
- Educate others about how bias affects who gets assigned to what tasks and teams
- Identify and work to close any gender pay gaps that exist

Reduce subtle biases/barriers
Subtle biases include tokenism, gender/color “blindness,” and within-group competitiveness versus collaboration. Provide sensitivity training around these biases, and offer ways to reduce them across the board—beginning with recruitment, and continuing through employee development, and performance evaluation and promotion.

Cultivate executive sponsors
Mentors are invaluable for helping women understand the unwritten rules and to prepare entry to mid-career talent for promotion. Sponsors are necessary for then moving this groomed talent into senior leadership roles. Individuals with sponsors are most satisfied with their rate of advancement.

“Mentors advise; sponsors act.”
— Sylvia Ann Hewlett, PhD,
Gender and Workplace Issues Expert

Compared to 57 percent of their unsponsored peers, 70 percent of sponsored men and 68 percent of sponsored women feel they are progressing through the ranks at a satisfactory pace. That translates to a “sponsor effect” of 19 percent for women.

Mentoring and employee development
The majority of mid-career STEM women (56 percent of specialists; 58 percent of mid-level managers) have sought mentors, a higher percentage than their male peers (53 percent and 56 percent, respectively). While the majority of women in STEM want mentors, there are few women in the upper ranks of STEM fields to serve in this role, which can be a source of frustration and attrition.

Recruitment/selection practices
Job postings should be worded to encourage women to apply. For example, use phrases such as: “ability to work on diverse teams.” Job posting language should not reflect stereotypical masculine or feminine behaviors. Interviewers and/or search committees should be educated on reducing unconscious attitudes of bias.

NOTE: Baseline framework was created by NCWIT; framework updated and expanded with KGWI data and other insight gathered by market intelligence. https://www.ncwit.org/resources/women-it-facts-infographic-2015-update
Globally, women feel less confident in their roles than their male counterparts—and this confidence gap extends across all key STEM skill sets and career stages.
Data from the most recent KGW1 research confirms a startling confidence gap: women in STEM jobs are not as confident as their male counterparts—and this confidence gap exists all the way up the career ladder.

59% of women in STEM agree/strongly agree they are in a position of high demand.

67% of men in STEM agree/strongly agree they are in a position of high demand.

STEM women respondent ratings compared to their male counterparts.

Without support in the early stages of her career, a female STEM worker is at risk of dropping out of a STEM-related industry or field of work. Research has demonstrated that mentoring or sponsorship greatly improves talent mobility and compensation—key levers in retaining top talent.45

Weighing confidence and competence

A May 2014 article in The Atlantic declared: “Evidence shows that women are less self-assured than men—and that to succeed, confidence matters as much as competence.”44

Yet, even women at the top lack confidence. A year before Lean In was published Facebook® COO Sheryl Sandberg said: “There are still days I wake up feeling like a fraud, not sure I should be where I am.”

Other highlights quoted in the article:

- Men overestimate their abilities and performance, and women underestimate both. Their performances do not differ in quality.
- A Hewlett Packard internal report found that women applied for a promotion only when they met 100 percent of the qualifications. Men applied when they met 60 percent.45
Confidence: Women versus men in key STEM skill sets

The confidence gap exists across all key STEM skill sets. Among men and women with STEM skill sets, the confidence gap is most pronounced in engineering, followed by science. Compared to males in their skill set, female IT talent, while relatively confident compared to other STEM women, still have areas where they are less confident of their market value and ability to compete than male peers.

### ENGINEERING STEM TALENT

<table>
<thead>
<tr>
<th>Perception</th>
<th>Males</th>
<th>Females below males</th>
<th>Females on par with males</th>
<th>Females above males</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>My skill set and experience puts me in a position to compete effectively with other job seekers.</td>
<td>74%</td>
<td>7%</td>
<td>81%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I were to consider changing jobs, I feel I am in a good position to secure a similar or better position.</td>
<td>63%</td>
<td>5%</td>
<td>68%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whenever I have tried, I have been able to find a new or better position.</td>
<td>72%</td>
<td>3%</td>
<td>75%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My employment experience to date has allowed me to develop skills that are in demand.</td>
<td>59%</td>
<td>6%</td>
<td>65%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel I am in a position of high demand in the marketplace.</td>
<td>53%</td>
<td>5%</td>
<td>58%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SCIENCE STEM TALENT

<table>
<thead>
<tr>
<th>Perception</th>
<th>Males</th>
<th>Females below males</th>
<th>Females on par with males</th>
<th>Females above males</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>My skill set and experience puts me in a position to compete effectively with other job seekers.</td>
<td>69%</td>
<td>6%</td>
<td>75%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I were to consider changing jobs, I feel I am in a good position to secure a similar or better position.</td>
<td>53%</td>
<td>3%</td>
<td>56%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whenever I have tried, I have been able to find a new or better position.</td>
<td>42%</td>
<td>2%</td>
<td>44%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My employment experience to date has allowed me to develop skills that are in demand.</td>
<td>68%</td>
<td>3%</td>
<td>71%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel I am in a position of high demand in the marketplace.</td>
<td>53%</td>
<td>5%</td>
<td>58%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### IT STEM TALENT

<table>
<thead>
<tr>
<th>Perception</th>
<th>Males</th>
<th>Females below males</th>
<th>Females on par with males</th>
<th>Females above males</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>My skill set and experience puts me in a position to compete effectively with other job seekers.</td>
<td>76%</td>
<td>3%</td>
<td>79%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I were to consider changing jobs, I feel I am in a good position to secure a similar or better position.</td>
<td>68%</td>
<td>2%</td>
<td>68%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whenever I have tried, I have been able to find a new or better position.</td>
<td>57%</td>
<td>2%</td>
<td>55%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My employment experience to date has allowed me to develop skills that are in demand.</td>
<td>76%</td>
<td>2%</td>
<td>76%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel I am in a position of high demand in the marketplace.</td>
<td>68%</td>
<td>4%</td>
<td>72%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The KGWI sample size for Math skill sets was too small to be included here.
Confidence: Women versus men in key STEM skill sets, by industry

The confidence gap also exists across industries reliant on STEM talent. Compared to men in their industry, women in STEM are least confident across key measures in Life Sciences, slightly more confident in Natural Resources, and most confident in High Tech.

NATURAL RESOURCES STEM TALENT

- 73% Males
- 8% Females below males
- 81% Females above males

My skill set and experience puts me in a position to compete effectively with other job seekers.

- 56% Males
- 10% Females below males
- 66% Females above males

If I were to consider changing jobs, I feel I am in a good position to secure a similar or better position.

- 48% Males
- 5% Females below males
- 53% Females on par with males

Whenever I have tried, I have been able to find a new or better position.

- 75% Males
- 1% Females below males
- 76% Females on par with males

My employment experience to date has allowed me to develop skills that are in demand.

- 61% Males
- 3% Females below males
- 64% Females on par with males

I feel I am in a position of high demand in the marketplace.

LIFE SCIENCES STEM TALENT

- 71% Males
- 7% Females below males
- 78% Females above males

My skill set and experience puts me in a position to compete effectively with other job seekers.

- 55% Males
- 4% Females below males
- 59% Females on par with males

If I were to consider changing jobs, I feel I am in a good position to secure a similar or better position.

- 44% Males
- 3% Females below males
- 47% Females on par with males

Whenever I have tried, I have been able to find a new or better position.

- 69% Males
- 6% Females below males
- 75% Females on par with males

My employment experience to date has allowed me to develop skills that are in demand.

- 55% Males
- 8% Females below males
- 63% Females on par with males

I feel I am in a position of high demand in the marketplace.

HIGH-TECH STEM TALENT

- 76% Males
- 4% Females below males
- 80% Females above males

My skill set and experience puts me in a position to compete effectively with other job seekers.

- 68% Males
- 2% Females below males
- 70% Females on par with males

If I were to consider changing jobs, I feel I am in a good position to secure a similar or better position.

- 58% Males
- 2% Females below males
- 56% Females on par with males

Whenever I have tried, I have been able to find a new or better position.

- 76% Males
- 7% Females below males
- 76% Females on par with males

My employment experience to date has allowed me to develop skills that are in demand.

- 70% Males
- 4% Females below males
- 74% Females on par with males

I feel I am in a position of high demand in the marketplace.

Note: The KGWI sample size for Math skill sets was too small to be included here.
What drives the confidence gap in STEM women?
The confidence gap in STEM women is driven by a number of factors, ranging from too many “lack of” situations, to bias, to isolation.

Lack of knowledge about hiring and advancement processes
One study found that women who weren’t applying for open positions or advancement believed the qualifications listed were mandatory minimums for hiring.

“They didn’t see the hiring process as one where advocacy, relationships, or a creative approach to framing one’s expertise could overcome not having the skills and experiences outlined in the job qualifications.”
— Tara Sophia Mohr, Harvard Business Review

Cultured mindset barriers
One driver of women not applying for “stretch” assignments is that they are socialized to be rule-followers—women do not apply if they don’t meet all of the requirements. Men, on the other hand, are socialized to be risk-takers.

Bias in (some) workplaces
A McKinsey report found that men are often hired or promoted based on their potential, while women are selected based on their experience and track record. If women perceive this bias in their own workplace, they would be less likely to apply for a job for which they did not meet the full list of qualifications.

Lack of peers and informal support networks/social isolation
Women often lack peers in their work environments, and even informal support networks. In work teams, female peers enhance women’s motivation, verbal participation, and career aspirations—in engineering, specifically.

The need exists and may even be greater at the very top, hence the existence of groups like the New England Women in Science Executives Club where C-suite level women and entrepreneurs in Life Sciences and academia—who are often the only women in leadership positions within their organization—can meet informally to develop support networks and discuss their work-life challenges and potential solutions.

Lack of formal support networks
While many firms now have formal mentoring and/or peer support networks in place, the ideal mentor for a STEM woman is another woman, but due to simple numbers and dropout rates for women in STEM, this isn’t always possible.

In many industries, women have formed local, regional, or national women’s organizations that are focused largely on mentoring. The national organization Women In Bio, whose core program MAPs (Mentors, Advisors, and Peers), is one example.

Direct managers have a role to play here, too. In 2015, only 31 percent of women said they believed their direct manager prioritized gender diversity.
Closing the confidence gap

To date, no one has discovered the secret sauce for closing the confidence gap. Cross-industry solutions recommended by experts include more female role models, executive sponsors, and open discussion/education regarding the confidence gap. Key measures for solving the confidence gap include:

**Share the statistics and encourage open discussion**

Just publishing some key stats and encouraging open discussion can help change behaviors.

“For those women who have not been applying for jobs because they believe all of the stated qualifications must be met, the [Hewlett Packard] statistic is a wake-up call that not everyone is playing the game the same way. When those women know others are giving it a shot when they don’t meet the job criteria, they feel free to do the same.”

— Tara Sophia Mohr, Harvard Business Review

But talking alone isn’t enough. In particular, senior executives need to “walk the talk”. While 74 percent of companies say gender diversity is a priority for their CEO, only 37 percent of women and 49 percent of men believe it. It’s critical that senior executives set the tone by being active participants at women’s events and publicly sponsoring high-potential women.

**Encourage executives to identify and actively sponsor high-potential future women leaders**

There are key differences between mentors and sponsors. Sponsors are senior individuals with power and influence; mentors can be at any level in hierarchy. Sponsors are visible supporters; mentors are often behind the scenes supporters. For Lynne Doughtie, her sponsor John Veihmeyer, KPMG’s global chairman, pushed to name Ms. Doughtie the managing partner of KPMG’s United States advisory business 10 years ago, when others felt she was too young for such responsibility.

“Having sponsors that put their own capital and credibility on the line for me helped me move into a number of leadership roles.”

— Dalynn J. Hoch, CFO at Zurich North America, Zurich Insurance Company

It may also be beneficial for those in leadership positions to reach out to high-potential candidates and encourage them to apply for open positions.
Ensure job descriptions focus on the need-to-haves for any role, and aren’t a quest for “purple unicorns”

Unrealistic job descriptions may be part of the problem. Make sure you aren’t providing a wish list of qualifications no one person could possibly have – if you send a message that you’re looking for a “purple unicorn” that doesn’t exist, you could be scaring off potential candidates that have the most important skills of all – the drive and intelligence to learn new technical skills in an era of constantly-evolving technologies.¹⁴

Make it easier/more accessible for women to be mentors and role models

Two-thirds of women in a KPMG study felt they had learned their most important lessons about leadership from other women, and 82 percent believed that networking with female leaders would help them advance their careers. Even so, four out of five women did not feel comfortable asking for mentors.¹³

Receiving praise from mentors and leaders was the single biggest factor influencing women’s perceptions of themselves in the KPMG study, more even than receiving raises and promotions.¹³

Lynne Doughtie, who was recently appointed KPMG’s first woman CEO, plans to constantly retell her story and build a network of mentors for young women, both to help them navigate their career paths and to encourage them to believe more in themselves.³²

Investigate gender pay gaps and invest in closing them

Money talks, and women listen. CEOs who are serious about gender equality must review employee compensation at all levels and close pay gaps.³¹
WHY WORK-LIFE DESIGN IS CRITICAL TO RETAINING WOMEN

While offering an attractive work-life balance is critical for retaining both men and women across all career stages, it’s important to take into consideration the types of support that women value most at various points in their lives and careers.
Women in STEM are clearly ambitious, and place a high value on career advancement opportunities when evaluating potential work opportunities. But, at various stages in their lives – including the critical mid-career times when they often drop out of the work force – STEM women value work-life design elements more than career advancement.

Even with work-life balance being a top priority, women in STEM are primarily attracted to employers that will develop them and their careers, as indicated by the pink shading of attraction factors.

<table>
<thead>
<tr>
<th>RANK</th>
<th>STEM WOMEN GLOBAL AVERAGE</th>
<th>ENTRY LEVEL</th>
<th>SPECIALIST</th>
<th>MID-MANAGER</th>
<th>EXECUTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Salary/benefits 88%</td>
<td>Salary/benefits 88%</td>
<td>Salary/benefits 90%</td>
<td>Salary/benefits 86%</td>
<td>Salary/benefits 85%</td>
</tr>
<tr>
<td>2</td>
<td>Career advancement 71%</td>
<td>Career advancement 76%</td>
<td>Work/life balance 73%</td>
<td>Work/life balance 70%</td>
<td>Career advancement 70%</td>
</tr>
<tr>
<td>3</td>
<td>Work/life balance 71%</td>
<td>Training/dev. programs 69%</td>
<td>Career advancement 70%</td>
<td>Career advancement 68%</td>
<td>Work/life balance 68%</td>
</tr>
<tr>
<td>4</td>
<td>Training/dev. programs 67%</td>
<td>Work/life balance 69%</td>
<td>Training/dev. programs 68%</td>
<td>Training/dev. programs 64%</td>
<td>Innovative projects 66%</td>
</tr>
<tr>
<td>5</td>
<td>Knowledgeable colleagues 59%</td>
<td>Knowledgeable colleagues 56%</td>
<td>Flexible work arrangements 63%</td>
<td>Innovative projects 59%</td>
<td>Training/dev. programs 61%</td>
</tr>
<tr>
<td>6</td>
<td>Flexible work arrangements 58%</td>
<td>Innovative projects 56%</td>
<td>Knowledgeable colleagues 61%</td>
<td>Knowledgeable colleagues 59%</td>
<td>Knowledgeable colleagues 61%</td>
</tr>
<tr>
<td>7</td>
<td>Innovative projects 55%</td>
<td>Flexible work arrangements 53%</td>
<td>Innovative projects 53%</td>
<td>Flexible work arrangements 56%</td>
<td>Corporate values 51%</td>
</tr>
<tr>
<td>8</td>
<td>Exposure to latest technology 58%</td>
<td>Environmentally friendly practices 46%</td>
<td>Exposure to latest technology 46%</td>
<td>Corporate values 46%</td>
<td>Leadership development 50%</td>
</tr>
</tbody>
</table>
What STEM women value in supporting work-life balance along the career spectrum

STEM women value the benefits shown below that help support a positive work-life balance, and for many of the benefits, they typically value them far more than men in the same career stage do. STEM women value different types of support at different life and career stages. While offering flexible work arrangements is important to women of all ages/levels, it is especially critical for mid-career women who are typically in their prime child-bearing and family-raising years. In a different way, STEM women in executive roles are looking for limits on work hours more than male counterparts, perhaps because they are seeking employer support that demonstrates they do not have to continue to prove themselves in typically male-dominated STEM cultures.

<table>
<thead>
<tr>
<th>CAREER STAGE</th>
<th>Entry level</th>
<th>Specialist</th>
<th>Mid-Manager</th>
<th>Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women value meaningfully more than men</td>
<td>Paid time off (55%)</td>
<td>Flexible work arrangements (72%)</td>
<td>Flexible work arrangements (71%)</td>
<td>Limits on hours (42%)</td>
</tr>
<tr>
<td></td>
<td>Childcare support (18%)</td>
<td>Childcare support (17%)</td>
<td>Childcare support (21%)</td>
<td>Cafeteria style amenities (28%)</td>
</tr>
<tr>
<td>Women value somewhat more than men</td>
<td>Flexible work arrangements (63%)</td>
<td>Wellness Programs (43%)</td>
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<td>Flexible work arrangements (68%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Limits on work hours (37%)</td>
<td>Limits on work hours (38%)</td>
<td>Wellness Programs (42%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Encouragement to use all vacation time (24%)</td>
<td>Encouragement to use all vacation time (19%)</td>
<td>Paid time off (34%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cafeteria style amenities (18%)</td>
<td>Volunteer during work hours (19%)</td>
<td>Encouragement to use all vacation time (26%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Limits on email (17%)</td>
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<td>Volunteer during work hours (20%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fostered Environment of Friendships at Work (22%)</td>
<td>Limits on email (17%)</td>
<td>Limits on work email (19%)</td>
</tr>
<tr>
<td>Women and men value equally</td>
<td>Wellness Programs (46%)</td>
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<td>Limits on work hours (38%)</td>
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</tr>
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<td>Fostered Environment of Friendships at Work (40%)</td>
<td>Fostered Environment of Friendships at Work (42%)</td>
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<td></td>
<td>Limits on email (17%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
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- Fostered Environment of Friendships at Work (42%)
**STEM women rate their employers higher than male peers do on work-life balance**

Since women give more weight to work-life design support when evaluating potential employers/positions, it makes sense that they would end up working for employers who offer more support and, in turn, rate their current employer more highly on the work-life support offered than their male peers do. But, some are also open to alternative means (e.g. freelancing) to ensure they have the work-life balance they need.

And the drivers of pursuing other employment are slightly different for women in traditional employment than men, with the opportunity for teleworking (working from home or remotely) a significantly more influential driver for women.

% listing teleworking as a “very influential” driver to decision to remain with current employer or pursue other employment

<table>
<thead>
<tr>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>14%</td>
</tr>
</tbody>
</table>

The confidence gap for women in STEM may play into their low current representation in the free agent population. (Women may have historically considered it too challenging to have to sell their services in a male-dominated field.) For male free agents, STEM skill sets represent two of the three top skill sets, for a combined 41 percent of free agents. For female free agents, none of the three top skill sets are STEM skill sets. IT skill sets represent just 13 percent of female free agents, Engineering 9 percent, Science 3 percent and Math 1 percent. All STEM skill sets combined total only 26 percent of female free agents, compared to 44 percent of male free agents.

**Top three skill sets of free agents by gender, by percent**

<table>
<thead>
<tr>
<th>Education</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>22%</td>
<td>23%</td>
</tr>
<tr>
<td>Finance/Accounting</td>
<td>Engineering</td>
</tr>
<tr>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>Finance/Accounting</td>
</tr>
<tr>
<td>16%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Companies across all STEM-intensive verticals are under pressure to close the gender gap and increase the number of women in leadership positions.
Women in leadership

Tech companies are coming under pressure to improve their diversity statistics, and a number of news sources now publish annual rankings on women in tech roles and women in senior leadership. Both matter. And even if your company’s industry isn’t publicly ranked, you can still benefit from setting, and tracking, gender diversity goals.

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>Employees</th>
<th>Percentage of leadership roles held by women</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINKEDIN</td>
<td>2015</td>
<td>4,235</td>
<td>30%</td>
</tr>
<tr>
<td>EBAY</td>
<td>2015</td>
<td>21,353</td>
<td>29%</td>
</tr>
<tr>
<td>APPLE</td>
<td>2015</td>
<td>59,869</td>
<td>28%</td>
</tr>
<tr>
<td>AMAZON</td>
<td>2014</td>
<td>77,179</td>
<td>25%</td>
</tr>
<tr>
<td>YAHOO</td>
<td>2015</td>
<td>6,138</td>
<td>24%</td>
</tr>
<tr>
<td>FACEBOOK</td>
<td>2015</td>
<td>5,479</td>
<td>23%</td>
</tr>
<tr>
<td>GOOGLE</td>
<td>2015</td>
<td>32,527</td>
<td>22%</td>
</tr>
<tr>
<td>TWITTER</td>
<td>2015</td>
<td>2,910</td>
<td>22%</td>
</tr>
<tr>
<td>INTEL</td>
<td>2015</td>
<td>53,732</td>
<td>17%</td>
</tr>
<tr>
<td>MICROSOFT</td>
<td>2015</td>
<td>59,796</td>
<td>17%</td>
</tr>
</tbody>
</table>

Other STEM-intensive verticals fare just as poorly as, or worse than, tech companies. Only 12 percent of biotech/pharma CEOs are women, only 4 percent of healthcare CEOs are.35

Why it matters

- Helps recruitment by sending highly visible signal to potential talent that women are valued in the company
- Boosts employee morale and engagement
- Supports leadership development efforts when women in leadership serve as role models, executive sponsors and/or mentors for less experienced STEM women

NOTE: The data and graphics presented on this page are from The Wall Street Journal.14 Rankings from other sources may differ based on the definition of leadership as well as the quality/extent of data provided by tech companies.
Women in technology jobs

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>Employees</th>
<th>Percentage of technology jobs held by women</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBAY</td>
<td>2015</td>
<td>21,353</td>
<td>24%</td>
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<td>2,910</td>
<td>13%</td>
</tr>
</tbody>
</table>

Why it matters

- Helps recruitment by sending a message that women find the corporate culture supportive and attractive
- Boosts employee morale and engagement
- Provides broader pool of talent to draw from when considering filling open leadership positions

Women executives can sometimes overlook/underestimate the power of being a role model. Mary Barra, named GM’s first female CEO two years ago, said one of the biggest things she’s learned is how important it is to other people that she’s a woman. “I think I missed it early on.” But she’s come to understand that some people need role models who they can identify with to help them see a path to success, a concept she said was foreign to her at first. She noted that at a recent GM town hall meeting, an engineer came up to her and thanked her for being in her role because it meant his 1-year-old daughter would never live in a world where having a woman CEO of an automaker would be considered newsworthy.57

NOTE: The data and graphics presented on this page are from The Wall Street Journal.56 Rankings from other sources may differ based on the definition of leadership as well as the quality/extent of data provided by tech companies.
Diversity scorecards: tracking progress toward gender diversity through metrics

While published rankings focus on the HR outcomes (women in technical roles, women in leadership), internal progress toward diversity (in all forms, not just gender) is measured and tracked based on key metrics that drive these outcomes:

**Internal and external talent pipeline**

The ability to successfully recruit and to develop a sustainable group of STEM women to lead the company.

- New hire demographics versus workforce
- Recruitment versus involuntary turnover
- New hires into top three levels versus current top three levels
- Representation, by age group

**Equitable talent development**

- Percentage of managers in mentoring programs
- Promotion into management versus workforce percentage
- Promotions within top three levels versus current top three levels
- Management promotions versus voluntary turnover

**CEO/leadership commitment**

- Representation at top three levels, and on board
- Percentage of executives on boards of women’s organizations
- Accountability metrics such as the percentage of total compensation tied to diversity metrics
- Percentage of CEO direct reports who sponsor women

**Talent’s perceptions of opportunity**

- Satisfaction with opportunities for growth and advancement, management, etc.
- Perception of meritocracy
- Perception of work-life balance

**Best Practices**

- Pick a small number of metrics that tie directly into strategy. Measure sparingly, tracking only those measures that tie directly to desired outcomes.
- Provide managers with the tools for success, including coaching and education, so they can attain the goals against which they are measured.
- Discuss metrics at least once a quarter. Some companies send out monthly status reports in between quarterly meetings.
- Use external benchmarks to gauge the competitive value of your progress. Tracking and regularly reporting on progress is a baseline, but the greatest value comes from putting the metrics in context. For example, BASF compares itself to others in the chemical industry as well as those in the DiversityInc Top 50.
- Link a significant portion of executive pay to meeting diversity targets. At Sodexo, for example, more than 15 percent of discretionary bonuses of all senior executives are linked to diversity goals, and for some it’s 25 percent.

The goal should not be to set up the perfect tool but to create meaningful dialogue based on data that help top leaders and their direct reports make the best decisions, especially around hiring and promotions.

“We started out spending too much time building the perfect mousetrap. We had too many bells and whistles, too many places to hide and argue over whether that decimal place is in the right place.”

— Patricia Rossman, Chief Diversity Officer at BASF
The STEM companies that are leading the charge towards a more gender-diverse workforce have one thing in common—they take a strategic, holistic approach to closing the gender gap.
DiversityInc’s survey of more than 1,600 companies, leads to a detailed, empirically
driven ranking of the top 50 companies in diversity, assessing organizational
performance based on four key areas of diversity management:

1) Talent Pipeline
2) Equitable Talent Development
3) CEO/Leadership Commitment
4) Supplier Diversity

Following are the top companies in Kelly’s key
industries that are on the list. 

Novartis

Novartis is ranked #1 in overall diversity by
DiversityInc, and has the best track record for
retaining and promoting senior-level women of
any firm DiversityInc has tracked. Since 2010, the
percentage of women at the top level (CEO and
direct reports) has tripled, while the percentage
of women at levels two and three has increased
by 42 percent and 31 percent, respectively.

Key elements to success include:

• Deep, visible CEO commitment, and an executive
diversity council focused on business goals and
metrics
• Diversity and Inclusion Councils - self-organized
groups of employees who have assumed
responsibility for infusing diversity and inclusion
within their functional areas and/or business
organizations. These groups regularly plan
and execute events that help to reshape their
departments’ cultures by encouraging employees
to understand and appreciate the climate of an
inclusive workplace.

• 19 employee resource groups (ERGs) (voluntary,
employee-led affinity groups with shared
characteristics, interests or life experiences) are
used for market development and recruitment/
talent enhancement. More than half (52 percent)
of employees participate in ERGs, an increase
of 13 percent over last year. Stated goals for the
ERGs include: support of recruitment, retention
and career development strategies and initiatives;
Networking and mentoring activities; creating
greater multicultural awareness and respect among
all employees; sharing of broader perspectives
and more creative solutions for the business and
its customers; and support for the company’s
community outreach and philanthropic efforts.
Groups include: Empowering Women to Act
Now, Women in Leadership and Working Parents
Connection (WPC). WPC specifically addresses
work-life design issues and helped shape Novartis’
flexible work program.

NOTE: Diversity stats in this section are from DiversityInc. Details of
diversity programs come from DiversityInc as well as company websites
and blogs.
Lilly

Ranked #27 in overall diversity by DiversityInc, Lilly has an impressive number of women on its board (four women, or 29 percent, versus the Fortune 500 average of 17 percent). The company also has four women on its Executive Committee, or 29 percent.

Key elements to success include:

• The Lilly Women’s Network celebrated its 20th anniversary in 2015, and has added chapters in countries where women are often underrepresented, such as Saudi Arabia, to help grow the ranks of female employees and female leadership.

• An online network, Women@Lilly (lillypad.lilly.com/women) includes blogs, infographics, videos and other materials featuring Lilly women from all over the world. Network initiatives include: quarterly speaker events focused on key leadership topics identified by Lilly women; mentoring programs to assist in the retention and development of women; and an annual recognition event to celebrate women promoted in the last year.

• Eli Lilly has a focus on formal, cross-cultural mentoring and sponsorship. Diversity goals are part of executive-performance reviews and senior executives are evaluated for their roles as cross-cultural mentors and their involvement with external multicultural organizations.

• The company also uses employee resource groups to identify and train talent to increase retention and engagement of women. Almost half of top-level executives (CEO and direct reports) sponsor a resource group.

• On-site child care is viewed as a valuable recruitment and retention tool, especially at certain geographic locations:

  • In addition to on-site childcare for infants through age five, the company hosts spring, winter and summer camp programs for 5-12 year olds to support parents during school vacation times.
  
  • Other offerings that support work-life balance include telecommuting, adoption assistance, paternity leave, floating religious holidays, on-site medical services and dependent-care referrals and leaves of absence. To help retain mid-career women, Eli Lilly showcases female leaders on its global intranet and promotes its development programs for women.

“Women often make that decision not to come back to work after having a first child – especially since most of our talent is recruited from outside of Indianapolis, so employees don’t have that family support to help care for the child. We know that several of our participant employees have turned down other jobs where they wouldn’t have had the benefit of onsite childcare.”

— Charlotte Hawthorne, Consultant, Global Diversity at Eli Lilly

NOTE: Diversity stats in this section are from DiversityInc. Details of diversity programs come from DiversityInc as well as company websites and blogs.
Rockwell Collins

Rockwell Collins has made DiversityInc Top 50 for five years running.

Key elements to success include:

- Employee Resource Groups are critical to Rockwell Collins’ diversity success. ERGs partnering with internal recruiters on sourcing and retention efforts, support on-site cultural awareness activities, host ongoing speaker series and educational presentations, offer mentoring, networking and career development opportunities, and support volunteer and fundraising needs within the community. ERGs include: Women's Forum, Latino Employee Network and The African American Professional's Forum.

- Executive Diversity Council, led by Chairman, President and CEO Kelly Ortberg, supported by a Diversity Advisory Council, with representation from each top-level organization, that functions as the "eyes and ears" of the company and meets biannually with the Executive Diversity Council.

- Executive-level board and committee involvement in groups including Women in Engineering Program Advocates Network (WEPAN), a non-profit educational organization to enhance the success of women in engineering professions.

Northrop Grumman

Awards include DiversityInc Top 50 (#35 in 2015); National Association for Female Executives (NAFE) – Top 50 Companies for Executive Women, based on female representation, especially the corporate officer and profit-and-loss leadership ranks; and Woman Engineer Magazine 20th Annual – "Top 50 Employers (#32)."

Comprehensive programs include:

- Women’s Conferences: In 2006, Northrop Grumman held its first Women’s Conference, with more than 500 women attending from across the company. Since then, the conference has become a recurring event, including speakers from the company’s senior leadership, panel discussions, and nationally known speakers addressing topics such as leadership, development and work-life balance. See the 2014 agenda: [http://www.northropgrumman.com/CorporateResponsibility/Diversity/Documents/2014WCAGenda.pdf](http://www.northropgrumman.com/CorporateResponsibility/Diversity/Documents/2014WCAGenda.pdf)

- Executive Diversity Council, with seven out of 17 members being women.

- Relies heavily on employee resource groups, and has rules in place to ensure their success, including that each of the 13 groups must have an executive sponsor.

- Northrup Grumman has had on-site child care at its Redondo Beach, CA location for 22 years and view it as a valuable tool in keeping women in the workforce.

Linkedin

LinkedIn says it is taking "a more holistic approach to recruiting efforts". The Women’s Initiative within the company’s Global Sales team and the Women in Technology initiative within their Engineering and Product organizations have built a framework to hire, retain, develop and advance women.

They have:

- Fostered a positive culture of inclusion through workshop learning sessions for all managers and above.

- Created recruitment strategies to attract women to senior leadership and technical roles.

- Provided an advancement architecture that empowers high potential women leaders to advance through sponsorship, coaching and leadership development.

- Supported the growth of technical women’s careers through workshops, mentorship events and tech talks on gender issues.

NOTE: Diversity stats in this section are from DiversityInc. Details of diversity programs come from DiversityInc as well as company websites and blogs.
RECOMMENDATIONS FOR BOOSTING FEMALE STEM TALENT

To boost hiring and retention of female STEM talent, companies must start at the top. Executives and those in leadership positions need to “walk the talk” to be successful.
RECOMMENDATIONS FOR BOOSTING FEMALE STEM TALENT

EXECUTIVE SUPPORT & ACCOUNTABILITY
Walk the Talk

- RECRUITMENT/SELECTION
  Write Job Reqs Like You WANT Women to Apply

- MENTORING & DEVELOPMENT
  Groom Them For Success

- EXECUTIVE SPONSORS
  Move Them Up

- REDUCE SUBTLE BIASES
  Keep It From Being a Boys Club

- PERFORMANCE EVALUATION, PROMOTION
  Treat Them Fairly

- FORMAL PEER SUPPORT PROGRAMS
  Make Them Feel They Belong

- SUPPORT FOR COMPETING RESPONSIBILITIES
  Help Them Do It All, and Do It All Well

- ONGOING EVALUATION
  You Can’t Keep Improving If You Don’t Track Progress
OVERVIEW AND METHODOLOGY

A high-level look at workforce trends from the Kelly Global Workforce Index (KGWI) and other Kelly research.
To better understand the motivations behind the empowered workforce, and how employers can best act and react to worker expectations, Kelly Services® developed the Kelly Global Workforce Index™ (KGWI), an annual global survey that is the largest study of its kind. In 2015, Kelly collected feedback from 164,000 workers across 28 countries and a multitude of industries and occupations. In 2014, nearly 230,000 were polled in 31 countries.

This study takes a high-level look at the talent gap that exists between men and women in science, technology, engineering, and math (STEM) fields. In addition to analyzing worker preferences and psychographic insights based on 2015 and 2014 KGWI survey data, this report pulls insights from Kelly Free Agent research (2015) and develops macro employer/employee trends using standard secondary research sources.

Skill candidates are in short supply across the globe. Employers in most any industry in search of workers to support growth and innovation have to contend with an employee driven market, in which organizations face intense competition to secure and retain the best talent. Understanding the drivers to the gender gap in STEM fields and industries, as well as the key levers for how to attract and retain skilled female talent in those fields, can unlock much needed advantage for companies and workers alike.

### KGWI Response Detail

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<thead>
<tr>
<th>By category</th>
<th>Number of responses</th>
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<td>2015</td>
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<tr>
<td><strong>Global Workforce Total</strong></td>
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<td><strong>Employment Status</strong></td>
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<td>Employed full-time</td>
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<tr>
<td>Employed part-time</td>
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<tr>
<td>Temp/casual/contract work</td>
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<td>Looking for work</td>
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<td>Retired</td>
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<td><strong>Industry Breakout</strong></td>
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<td><strong>Geographic Breakout</strong></td>
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<td>APAC</td>
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<td><strong>Generational Breakout</strong></td>
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<td>Millenials (1980-1995)</td>
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<td>Gen X (1965-1979)</td>
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<tr>
<td>Baby Boomers (1946-1964)</td>
<td>20,382</td>
</tr>
<tr>
<td>Silent Gen. (1935-1945)</td>
<td>576</td>
</tr>
</tbody>
</table>
Footnotes


5. She-conomy.com, “Marketing to Women Quick Facts” http://she-conomy.com/facts-on-women

6. Smart Design, “6 Predictions that will change design as we know it,” By Dan Formosa, June 16, 2015 http://smartdesignworldwide.com/thinking/6-predictions-that-will-change-design-as-we-know-it/


31. EngineeringUK, “UK has Lowest Number of Female Engineers in Whole of Europe,” 2014 http://www.engineeringuk.com/View/?con_id=145

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37. Live Mint, “Indian companies struggle to place women on boards,” By Amit Bhandari and Amritha Pillay, April 21, 2015 http://www.livemint.com/Companies/9tIeuFcZJUAPPfjxcTHpvJ/Indian-companies-struggle-to-place-women-on-boards.html


45. Hewlett Packard Internal Report

Further Reading

About Kelly Services

As a global leader in providing workforce solutions, Kelly Services, Inc. (Nasdaq®: KELYA, KELYB) and its subsidiaries, offer a comprehensive array of outsourcing and consulting services as well as world-class staffing on a temporary, temporary-to-hire, and direct-hire basis. Kelly® has a role in managing employment opportunities for more than one million workers around the globe by employing 550,000 of these individuals directly with the remaining workers engaged through its talent supply chain network of supplier partners. Revenue in 2015 was $5.5 billion. Visit kellyservices.com and connect with us on Facebook®, LinkedIn®, and Twitter®.