EXAMINING THE PIPELINE

WHAT HAS THE BIGGEST IMPACT ON GENDER PARITY IN TECH?

2017
# CONTENTS

1. SETTING THE SCENE: THE UK’S GENDER DIVERSITY LANDSCAPE IN TECH  
   3

2. ABOUT THIS STUDY  
   4

3. WHAT ATTRACTS WOMEN INTO TECH?  
   5

4. CAUSES OF THE GENDER GAP  
   7

5. UNDERSTANDING THE CULTURE  
   9
   - Change and disruption
   - Lack of gender diversity
   - Negative characteristics
   - Positive characteristics

6. THE MOST SIGNIFICANT CHALLENGES FACING FEMALE EMPLOYEES  
   14

7. RETAINING EXISTING TALENT: WHAT NEEDS TO CHANGE?  
   15

8. FIVE KEY TAKEAWAYS FOR EMPLOYERS  
   17

9. SOURCES  
   18
1. SETTING THE SCENE: THE UK’S GENDER DIVERSITY LANDSCAPE IN TECH

Since the dot com boom, a number of high profile women in technology have become household names. Female leaders like Marissa Mayer (Yahoo!), Sheryl Sandberg (Facebook) and Martha Lane Fox (Twitter, MyDeco.com, LastMinute.com) have used the platforms their roles provide to speak out in the hope of encouraging more young female talent into and up through the sector. Their efforts run in tandem with a myriad of campaigns aimed at increasing gender diversity, many of which focus on the sector’s potential for a creative, trailblazing, entrepreneurial career without limits.

It must be wrong that [the technology] sector has a low percentage of women and it must be incumbent on all leaders in this sector to do something about it, year by year by year until we get better.

Their efforts—along with those of many male ambassadors of change—are motivated not just by a sense of fairness, but by good business sense. In the US, women are responsible for up to 85% of all consumer goods purchases. Low female inclusion in the technology sector means that the needs of its core customers are simply not being represented.

Despite these initiatives, gender disparity remains an issue that has serious implications for the sector’s future success:

- Overall, the number of women in the technology sector remains stubbornly low at 16%.²
- The number of females occupying leadership positions currently sits at 5%.³
- A 2017 study by PwC found that only 3% of females say that technology is their first choice of career.⁴
- The same report finds that only 16% of schoolgirls have had a career in technology suggested to them (compare this to 33% of boys). And despite the work done by pioneering women in the sector, 78% of students cannot name a famous female working in technology.
- One report estimates the annual shortfall of engineering skills alone at 55,000 individuals.⁵
- Two thirds of tech leaders acknowledge that the talent pool shortage is a major inhibitor of current and future success.⁶
In this study, we look more closely at the specific challenges for women in technology. What attracts them to the sector? What are the pipeline and cultural issues they face as they forge ahead? What factors enable them as they navigate through such challenges? And what more can organisations do to hold onto their valued female talent pool? Such insights should prove useful to the business leaders, human resources and diversity and inclusion managers challenged with tackling the gender gap across their technology businesses.

Though the majority (91%) of our sample is made up of women, we also spoke to a portion of men (9%). Job titles of those taking part in our survey range from entry level through to associate, manager, director and head of department, vice president, C-suite executive, CEO and business founder/owner. They include both the corporate world and smaller, start-up businesses.
3. WHAT ATTRACTS WOMEN INTO TECH?

The women we surveyed are far less likely than their male counterparts to have spring-boarded into a STEM career from a related academic discipline. Perhaps unsurprisingly given the gender imbalance in STEM-related degrees, only 46% of our women studied a STEM subject, compared to 59% of men.

WHAT DID YOU STUDY BEFORE WORKING IN TECH?

Educational pathways aside, we wanted to know which factors were at play when women decided to embark on a career in technology.

WHAT MADE YOU CHOOSE A CAREER IN TECH?

The opportunities for career progression: 18%
- The rise of the industry and its importance to the future: 17%
- The type of work I could get involved in: 15%
- Chance to do exciting work and innovate: 14%
- The reputation of the organisation: 9%
- Technology/the organisation suited my skillset: 9%
- Inspired by someone I knew, i.e. parent, teacher, mentor or role model: 8%
- Starting salary and/or salary potential: 6%
- Access to learning and development: 2%
- Opportunities to travel: 1%
Our results suggest that the work being done by multiple organisations, including our own, to raise awareness of the rich opportunities for career progression and the exciting breadth of roles and responsibilities available in this dynamic sector, is getting some cut through.

Encouragingly, the number one reason women choose a career in technology is the opportunity it presents for career progression (18%). This suggests that the message of female leaders, technology companies themselves, and campaigns such as role model-elevating Awards programme—that technology is an industry in which women can and do reach the top—is being heard.

Equally important is that the other popular reasons for choosing technology point to a breaking down of myths about the sector— that it is one in which women cannot make their mark and that it is more suited to male ‘geeks’. 17% of women choose technology in recognition of its importance for the future; 15% because of the type of work they can get involved in; 14% for the chance to engage in exciting, innovative work.

Fewer than one in ten women (9%) choose to enter the sector because of the specific reputation of the employer, highlighting an opportunity for such businesses to work on how they position themselves to potential candidates. Additionally, just 9% of women choose to follow a tech career because they recognise that the industry or the organisation they join requires their specific skills—demonstrating that more work needs to be done to raise awareness of the types of skills tech businesses need in order to thrive in the future.

Only 8% of women take on a tech role having been inspired by a parent, teacher or mentor, and fewer still (2%) because of the on-going education (“access to learning and development”) that such a career could afford. These present two clear opportunities for organisations wishing to attract new female talent, via initiatives aimed at educating parents and teachers and publicly promoting the opportunities for learning and growth.

**KEY ACTION POINTS FOR ORGANISATIONS**

- Continue to showcase the breadth and scope offered by a career in technology by elevating your business’s female role models.
- Continue to educate young girls, women and their educators on the reality of a career in technology.
- Uncover methods for shining a spotlight on the specific skillsets required by your organisation to enable young girls choosing educational and career paths to draw comparisons with their own talents and goals.
- Utilise role models at every stage of the talent pipeline to share their career stories with both young girls starting out and women already in the sector.
- Design clear learning and development strategies and publicise these widely in order to tap into on-going educational goals of female employees.
4. THE CAUSES OF THE GENDER GAP

Numerous studies and reports have highlighted some of the reasons behind the technology industry’s on-going gender disparity. Common reasons cited by various sources include:

- The lack of female role models for young girls choosing career paths
- The lack of female role models for women already working in the sector
- Male-dominated workplace environments and cultures that put off women
- Lack of opportunities for onwards learning and development

We asked our sample of women working in technology to tell us the foremost reason for the technology sector’s lack of female talent.

**WHICH OF THIS FACTORS DO YOU THINK IS THE BIGGEST CAUSE OF THE GENDER GAP IN TECH?**

We asked our sample of women working in technology to tell us the foremost reason for the technology sector’s lack of female talent.

<table>
<thead>
<tr>
<th>Workplace cultures that don’t welcome or support female progression</th>
<th>36%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too few female role models for young girls</td>
<td>32%</td>
</tr>
<tr>
<td>Too few role models for women already working in technology</td>
<td>24%</td>
</tr>
<tr>
<td>Lack of learning and development opportunities</td>
<td>8%</td>
</tr>
</tbody>
</table>
These results mirror those of other reports that suggest that technology’s gender imbalance is caused by a combination of talent pipeline issues and organisational culture.\textsuperscript{12} Keenly observed by our respondents is the deficiency of female role models both for young girls making their career choices (32\%) and those women already working in technology who are in need of examples by which to navigate their careers (24\%). A lack of opportunities for learning and development is also noted as a factor in the sector’s female talent shortage.

But the biggest issue, according to our sample of women, is one of a male dominated culture that simply does not welcome or support female progression (36\%).
We wanted to better understand the workplace culture in which the women we surveyed operate.

We asked each participant in our study to describe their workplaces in three words or phrases. We offered no prompts.

The results can be viewed as a temperature check of how women in technology currently feel about their working environments. They hint at the enormous range of factors which attract, retain, engage and advance women into and upwards through the sector, as well as the equally widespread range of issues that block them from entering into and advancing through the pipeline.

Broadly speaking, they fall into four categories:

1. **CHANGE AND DISRUPTION**
   This category tells the story of the rapid pace of progress and disruption characterising the sector and is described in largely positive terms.

2. **LACK OF GENDER DIVERSITY**
   This category highlights the male-dominance at play in technology and is described in wholly negative terms.

3. **NEGATIVE CHARACTERISTICS**
   Descriptions that fall outside the former points but indicate problems and challenges facing the sector’s employees.

4. **POSITIVE CHARACTERISTICS**
   Descriptions that fall outside the former points but indicate beneficial aspects of working in technology.
“The external force field is changing so it might be we need to take purposeful approaches to think ahead. We can learn from where we’ve been and learn from others too.”

Fiona Morden
‘Future proofing your career’
everywoman masterclass speaker
2016 everywoman Forum: Advancing Women in Technology

CHANGE AND DISRUPTION

The above represents a selection of the most common descriptions of the culture within the technology industry as described by our female survey participants.
“I’ve had teams that are heavily male, others heavily female, and others—like the one I have now—with an even split. I’ve seen the difference diversity makes to the breadth of thoughts and ideas; it’s in that mix that you get the best results.”

Katrina Roberts
Vice President of Consumer and Commercial Lending Technology
American Express

LACK OF GENDER DIVERSITY

The above represents a selection of the most common descriptions of the culture within the technology industry as described by our female survey participants.
We are bombarded with information like never before; the time allowed for making change comes in increasingly accelerated cycles; technology connects us 24/7 to the unexpected; we’re sleeping less, travelling more.”

Tacy Byham
Senior Vice President
DDI14

The above represents a selection of the most common descriptions of the culture within the technology industry as described by our female survey participants.
I’ve watched the industry become much more collaborative, not just within organisations, but in how we partner up with other companies, open up our platforms for use by external communities, and interact with start-ups. This collaborative approach is particularly great for women who aspire to leadership roles within technology. We’re naturally good at working with others to understand what the customer wants and create great solutions.”

Kerry McGuire
Vice President of New Business Ventures
ARM15

The above represents a selection of the most common descriptions of the culture within the technology industry as described by our female survey participants.
6. THE MOST SIGNIFICANT CHALLENGES FACING FEMALE EMPLOYEES

There are four key challenges facing women in technology. The biggest can be described as a cultural issue: long hours and their detrimental effect on health and well-being is the largest issue facing 36% of women. For 29% of the women in our study the most significant hurdle is the lack of opportunity for them to progress their careers. Broader cultural issues and work-life balance struggles are the biggest factors for 21% and 14% of women.

Where this final point is concerned, those women who are parents report mostly good levels of support from their employers—though the room for improvement is clear. Just 2% said that their employers were not at all supportive when it comes to balancing career progression and home-life demands. Slightly fewer than half (47%) say their organisations have been “completely supportive” of the same. While 51% describe their employers as “somewhat supportive” in those circumstances.

Given the most significant challenges for women in technology, what needs to change for businesses to retain their female talent and have a positive impact on the bottom line?

The biggest challenge was actually my own self-confidence. It’s well documented that a lot of women suffer from this impostor syndrome, so that — more than the struggle of juggling work and home life — has probably been the biggest challenge. The way that I’ve tried to overcome that is to try to be really open about it. Talking to others has actually reduced that anxiety because I have realised so many other people feel this too.

Sheridan Ash
Technology and Investments
Director, PwC
According to a 2014 US study, women in IT roles are 45% more likely than men to leave in their first year. While there has been a focus on attracting more female talent into technology roles, in many cases, there has been less emphasis on retention and how women already embarking on tech careers can be better nurtured so that they progress to leadership positions. When such issues are discussed, it is often in conjunction with the need for flexible working.

Our survey found that though flexible and agile working options are important to female retention — cited by 17% of our women as the most important factor influencing their decision to stay on with their current employer, it is not necessarily the lead factor. One quarter (25%) of women state that access to female role models is the foremost factor that will keep them in their roles. Being able to “see what they can be” is the most common retention factor cited by the women in our study.

Sarah Greasley
CTO, Direct Line

I’ve been to technical executive meetings and there are not many female CTOs in the UK […]. Role models are really important because […] you start to build critical mass. You start to build that volume of people and that makes all the difference. And you start to see how having women at the top table actually changes the dynamic.
This tallies with previous everywoman research, which demonstrates that when women have regular access to female role models in business, they are:

- More inspired in their own careers (74%), and,
- More likely to be promoted (42%)

It’s interesting to note that just as important to women as flexible working options (17%), is the knowledge that the organisation they work for is one that is committed to achieving gender parity and is investing in bringing that about.

Nearly one fifth of women say that this is the most important factor in their decision to stay with their employer—more important even than increased pay. This should be a key learning for organisations as they devise diversity and inclusion strategies.

Meaningful work was cited as the most important retention factor for 12% of women, increased pay by 12% and access to more opportunities for learning and development, 9%.

Our strategy for attracting, engaging, retaining and advancing women in business is based on a dual pronged approach of offering quality learning and development, and access to strong female role models.

We asked women to rate the importance of each of these facets in helping to close technology’s gender gap.

Where access to role models is concerned, our panel awarded this pillar an average score of 8.27 out of 10. Additionally, 46% of our women rated the importance of role models as either 9 or 10 out of 10.

Where learning and development is concerned, our panel awarded this pillar an average score of 7.99 out of 10. Additionally, 44% of our women rated the importance of learning and development as either 9 or 10 out of 10.

THE MODEL AT A GLANCE

**UNCOVER ROLE MODELS**

+ **INVEST IN FEMALE TALENT**

= **STRONGER RETENTION AND ENGAGEMENT LEVELS**

= **LOWER TURNOVER**

= **GREATER PROFITS**
8. FIVE KEY TAKEAWAYS FOR EMPLOYERS

The case for gender diversity is well established. Organisations that commit to and invest in gender balance and equality are more productive and more profitable. Those that invest in engaging and advancing their female talent are also much less likely to incur the substantial costs associated with loss of female talent pools. Our survey has uncovered some key, practical solutions for technology businesses seeking to address their gender imbalances and encourage more women through the talent pipeline.

1. Uncover the role models in your existing environment and utilise them for the purpose of attracting fresh talent into the sector

Particular points to focus on should be the specific skillsets needed by the tech sector, and the diversity of career paths available.

2. Provide your existing female talent with access to internal and external role models.

The focus should be on what a career in technology can look like and how women can overcome the specific challenges they face as they navigate career paths. Organisations can benefit from looking externally too, at examples of organisations that are creating robust talent pipelines and better gender parity.

3. Tackle the cultural issues that prevent women from entering and remaining in the sector

While at the same time harnessing the power of the sector’s dynamism and other positive traits that attract women and enable them to stay and flourish.

4. Provide quality learning and development for female talent

This is currently not something that is attracting women into the sector in extremely large numbers—a fact that could give the edge to those organisations in positions to declare a genuine commitment to providing on-going education.

5. Address how your organisation will publicise its commitment to gender diversity

This involves both public communications as a means for attracting female talent, and internal communications as a means to engaging, retaining and advancing current employees. Organisations may be doing great work behind the scenes to increase female representation, but how this is communicated to workforces could be key to increasing retention levels.
9. SOURCES

1. She Conomy. Marketing to Women Quick Facts. Available at: http://www.she-conomy.com/facts-on-women
15. ‘It’s not all about toiling away in a lab!’ – the truth about technology careers from ARM’s Kerry McGuire. everywoman. Available at: http://www.everywoman.com/my-development/learning-areas/articles/it’s-not-all-about-toiling-away-lab-truth-about-technology