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TECHNOLOGY

Disruptive Shifts in Tech & Engineering hiring: Our Survey Insights

In the tech and engineering world, disruption happens. So when a survey of over 1,000 hiring decision makers within technology and engineering in the US reveals some disruptive insights, we revel in sharing what we've learned.

Today's hiring scene is seeing record-low unemployment rates, shallow talent pools, and a seemingly widening talent gap. To uncover the concerns of both top technical talent and the organizations that need them, we surveyed over 1,000 hiring decision makers in technology and engineering throughout the US on issues pertaining to recruitment, benefits, employer challenges, and other developments influencing the existing and future workplace. The results reveal a shift in the expectations of the current workforce, the risks of maintaining the status quo, and the focus for the future.

In this report, you will find an in-depth look at the challenges, changes, and cravings of the existing engineering and tech landscape. With an eye on the shifting trends – and a breakdown of the gap between the current and the future state of the industry – employers can overcome a troubling talent gap, concerning diversity lapses, and retention struggles.

The trouble with the talent gap.

Companies and organizations of all sizes and across all industries agree: There is a troubling gap between the

available talent pool and the growing needs for those roles. Of the 1,006 decision makers we asked, over 80 percent reported high levels of concern about a talent gap in technology and engineering. Here, we'll dive into what's causing this gap and how employers might build a bridge between the talent available to them and the talent they need.

Breaking down the gap.

As the demand for skilled engineering and tech talent rises, and the unemployment rate in the industry dips, employers are left feeling let down. When it comes to hiring talent with the appropriate technical skillsets, 41 percent of decision makers within technology and engineering fields indicated it's becoming more difficult to find the skilled professionals they need.

When assessing available candidates for open engineering and tech roles within their organization, decision makers reported that on average, 43 percent of candidates lack the technical skills required for the role. Clearly, a perceived skills gap is contributing to the frustration among decision makers as they look to hire within the engineering and tech space.

Bridging the gap.

A recent study suggests that the perception of a skills gap in tech might be more complicated than a broad-brush assumption that the talent pool lacks technical skills. After reviewing 114,000 resumes, the study found that the problem isn't necessarily that jobseekers don't possess skills that employers want – it's that jobseekers aren't marketing the required skills that employers need for specific roles and are instead showcasing skills that are expected of the tech industry in general.

In addition to relevant technical skills, some soft skills prove more challenging to find than others. The decision makers we asked said communication and teamwork (23 percent), along with interpersonal skills (22 percent), are proving to be the most difficult soft skills to find in candidates.

And as the hiring competition heats up, experienced workers are becoming increasingly challenging to recruit and retain as a result of an increased demand – and dwindling supply – of skilled talent in engineering and tech. In a recent op-ed on America's skills gap, Jake Swartz, co-founder and CEO of General Assembly Swartz writes: "I've observed three troubling drivers of the economic friction fueling the skills gap: a surprising lack of visibility and long-term planning around concrete skill and talent needs within the enterprise; incredible inertia around and adherence to old-school hiring practices that perpetuate growing equity gaps through a search for new skills in conventional places; and a tendency to misplace hope that our higher education and workforce development systems can somehow "solve" the problem with minimal corporate involvement or responsibility.



Our survey reveals differing opinions along generational lines in respect to the current talent pool. 44 percent of Gen Xers and 62 percent of Boomers said it is becoming increasingly difficult to find candidates with the right technical skillsets, compared to 24 percent of Millennials.

Securing the talent you want – those with the skills you need.

Candidates in today's job market have access to a wider variety of occupations and a greater number of jobs than ever before. Engineering and tech workers can work remotely, on assignment, in a corporation, as a consultant, temporarily, permanently, or with any combination of these employment options.

With more flexibility than ever before, workers with qualifying skills and the coveted experience in

engineering and tech have the upper-hand when it comes to job choice – and top talent is demanding more from their employers as a result of this leverage.

To find out what today's top talent wants from future or current employers, we asked decision makers to identify which incentives were most influential to the current engineering and tech workforce. Here's what they had to say:

What do engineering tech workers want in a job?

According to our survey results, there's a shift occurring in the dominance of salary as a recruitment and retention strategy.

Among those we surveyed, salary concerns fell out of the top spot. Ranked in order of importance, the results are:



1. Opportunity for career advancement



2. Competitive salaries & raises



3. Ability to create change or have a voice within the company

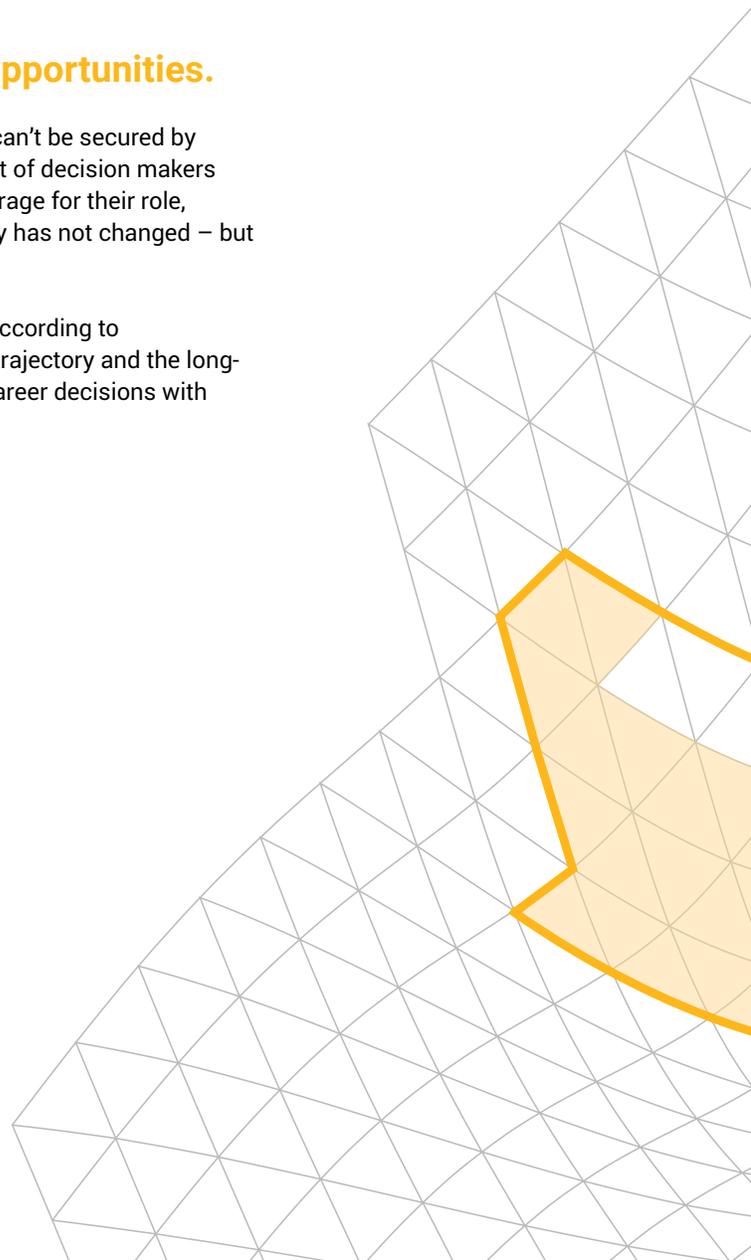


4. Ability to innovate and create new products, projects or ideas

The spotlight has turned to advancement opportunities.

Decision makers in tech and engineering are aware that top talent can't be secured by dangling a hefty salary carrot alone. In last year's survey, 55 percent of decision makers agreed that workers expect a salary that aligns with the market average for their role, compared to 63 percent in 2019, indicating the importance of salary has not changed – but is simply expected by candidates when evaluating a new role.

Career advancement opportunities have increased in importance, according to respondents. Top talent is increasingly mindful of their own future trajectory and the long-term growth outlook within an organization – and they're making career decisions with these projections in mind.





Career considerations and concerns by generation.

When asked to rank the most important benefits for attracting and retaining talent, survey respondents said that the opportunity for career advancement beats out competitive salary and raises. The ability to innovative and create new products, projects or ideas came in third.

Here's where the generations differ: Ranking the benefits, Generation Z (those aged 25 or under) and Millennial (those aged 26-34) respondents collectively agreed that the ability to create change within a company is of high importance – placing it just behind the opportunity for career advancement. Ranking competitive salary and raises as of less importance than advancement opportunities and the chance to create change, Millennials and Gen Zers have their sights set on their futures.

As a matter of fact, Gen Z places even less of an emphasis on salary. Here's how they ranked benefits when asked to place them in order of importance:

1. Opportunity for career growth
2. Ability to create change or a have a voice within the company
3. Opportunity to work on a world changing products
4. Competitive salary and raises

Generation X (those aged 35-54) and younger Boomers (those aged 55-65) ranked their top three most attractive benefits the same:

1. Opportunity for career growth
2. Competitive salary and raises
3. Ability to create new products, projects or ideas

Among those we asked, older Boomers and Traditionalists (those currently 65 years of age or older) were the only group to rank salary and raises above career advancement. As 10,000 baby boomers reach retirement age every day, and more Gen Zers enter the workforce, we can expect to witness more shifts like this into 2030 and beyond.

Shifts in Career Priorities by Gender.

Both men and women ranked the opportunity to advance in their careers as the most attractive benefit, followed by salary, but the tertiary results differed by gender:

- The ability to create change or a have a voice within the company places as third in importance for women.
- The ability to create new products, projects or ideas places as third in importance for men.

To echo these results, more than half (56 percent) of decision makers agreed that workers in their field are more concerned about out-of-the-box benefits than salary.

Out-of-the-box benefits shining.

When asked about what benefits were most appealing to their employees or potential employees, 39 percent chose flex-hours, while just 6 percent picked tuition reimbursement. Flex-hours were the most commonly desired out-of-the-box benefit in both technology and engineering fields, and across generational lines. The ability to work remote ranks second – at 23 percent—as the most appealing benefit to engineering and tech talent in 2019.

To retain your best employees (or to find the right employment fit), it's vital to understand the reality – and the dream – working environment for IT and engineering professionals. Get a clearer picture with the following infographic:



The desires and expectations of top tech and engineering talent have experienced a subtle shift – and it's more important than ever that jobseekers and employers are clued in on the changing landscape of this thriving industry.

To retain your best employees (or to find the right employment fit), it's vital to understand the reality – and the dream – working environment for IT professionals. Check out our infographic, which reveals the results of our survey with Allison+Partners, to understand what the best in tech actually want from their work.



WHAT'S YOUR (HI)STORY?



While the present might be a gift, the past will be unwrapped, too:

A staggering 81.2% of hiring decision makers said that job history was extremely/very important when making a hiring decision.

Considering a lesser number (78.5%) said the same of “demonstrations of skill,” and 70% said the same of a “college degree in a related field,” it's safe to say that to employers – it matters not just where you're going, but also where you've been.



SHOW MORE THAN THE MONEY

When it comes to attracting top tech and engineering talent today, cash is no longer king.

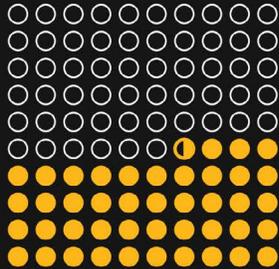
As a matter of fact, 55.9% of decision makers agreed that workers in their field are more concerned about out-of-the-box benefits than salary.

When asked about which non-traditional benefits were most appealing to their employees/potential employees, 38.6% chose flex-hours. But in ranking the most important benefits for attracting/retaining talent, the podium looks like this:

1. Opportunity to advance
2. Salary and raises
3. Ability to innovative and create new products, projects or ideas

55.9%





43.4%



AGE IS JUST A NUMBER...

And the numbers are frustrating for decision makers in tech and engineering. Because when it comes to rounding out diversity initiatives, the aspect decision makers find most frustrating to address is age.

43.4% of decision makers said the aspect of diversity their field struggles with the most is age.



MIND THE GAP

It's a safe bet to conclude that skills training should be a renewed focus for employers and job seekers alike.

80.5% of respondents reported high-levels of concern about a skills gap in tech.

In a related question, 41.3% of decision makers also said it's becoming more difficult to find talent with the appropriate technical skills.

80.5%



41.3%



67.4%



THINGS ARE LOOKING UP

Despite hiring frustrations among decision makers, the future is looking good for engineering and tech talent.

67.4% of hiring decision makers surveyed indicated they plan to increase headcount in 2019.

The hiring outlook for 2019.

Our survey revealed 2019 is going to continue to experience significant growth in the tech and engineering space as the majority of leaders plan to increase headcounts.

Our survey results reveal an even more aggressive growth plan for mid-size organizations (those with 500-999 employees) with 76.3 percent revealing plans to increase headcount.

When increasing headcount, employers should focus on what they need to do to attract and retain talent with the right technical skillsets for transformative technologies of the future.

As new innovations and technologies continue to impact the workplace, employers should maintain a focus on upskilling and training employees to meet their organizations' workforce needs.





Upskilling talent for an agile workforce.

Despite the growing concern about finding enough skilled tech workers, many companies are looking ahead for ways to reskill their current workforce and retain their top talent. To build sustainable pipelines of qualified talent, top companies are focusing on fostering continuous learning within their current workforce in order to keep employees engaged and educated not just for the roles needed today but also for the skills required for tomorrow.

In reaction to the existing tech revolution, top companies are making a commitment to continuous evolution, innovation, and education. By investing in training their current workforce, employers create a more attractive environment to entice other qualified applicants to their organizations, while funneling their existing employees into desired advancement opportunities.

Building a talent pipeline.

In addition to actively recruiting candidates with tech skills with the help of industry-specialized staffing partners like us, top companies are battling a thin talent supply – and the corresponding choosiness of jobseekers in tech and engineering – by helping their existing or incoming talent learn the skills required of those highly sought-after positions.

To do this, organizations are activating upskilling programs – like those offered by our sister organization in the Adecco Group, General Assembly, to give their existing workforce access to technical education and transformative career instruction offerings.



“Increasingly, companies are looking at build versus buy approach when it comes to thinking about talent. As technology changes in real time, and workers struggle to keep pace with these changes in a world that requires constant upskilling, companies have recognized that they have a responsibility in ensuring that their workforce have the relevant skillsets as mastery of data, design, and technology principles affect every company and every job category.

For example, Disney identified that there was a need for more women among their ranks of software engineers. Rather than look externally, Disney invested in existing talent through the CODE:Rosie program. Disney selected a cohort of women across the business to reskill through General Assembly’s 12-week web development immersive program, which armed them with front-end and back-end programming skills in JavaScript, HTML, CSS, and Ruby on Rails, and then moved them into new roles using these new skills. By investing in longstanding employees with understanding of the business and operation and providing them with an entirely new skill set, Disney made a cost-efficient investment in their workforce that allowed them to retain loyal and seasoned talent.”

Jake Schwarts

co-founder and CEO of General Assembly

Training for the future of engineering and technology.

When asked which areas of technology will have a major impact on engineering and technology in the next five years, cybersecurity tops the list, followed by cloud storage, data engineering and computer vision. With the unemployment rate among cybersecurity professionals hovering around a virtual zero, and cybercrime more than tripling the number of job openings over the next 5 years, the need for skills training can't be overlooked.

When asked about the use of artificial intelligence (AI) in their field, 32 percent of respondents designated machine learning – and 28 percent specified predictive analytics – as the most anticipated impacts on their businesses.

Businesses should work to constantly to engage and reskill employees in order to inspire a culture of continuous learning and also to nurture a sustainable talent pipeline.

Battling diversity barriers in technology and engineering.

To compete in the current hiring landscape, a diverse workforce isn't a luxury – it's a necessity. It's no secret: Diversity enhances performance and efficiency while also encouraging innovation. Persistent diversity gaps in the fields of engineering and technology have garnered increased scrutiny in recent years, causing many companies to launch new initiatives to recruit, hire, and source more diverse talent pipelines.

When asked about the biggest challenge to diversity in their field, 43 percent of decision makers named age as the biggest struggle and a quarter of respondents (29 percent) chose gender. While age held the highest rank, industry data points to a lack of women and people of color in these fields, suggesting that more awareness-building needs to take place in order to close diversity gaps and develop technology and engineering teams that are broadly representative of the American workforce.



To compete in the current hiring landscape, a diverse workforce isn't a luxury – it's a necessity. It's no secret: Diversity enhances performance and efficiency while also encouraging innovation.

Focus on the future.

As businesses look to the future, here are a few best practices that can help create an agile workforce:

- Gain a clear understanding of the skills your workforce lacks
- Reskill existing employees to meet future needs
- Create a talent pipeline with the help of an industry-leading staffing solutions provider
- Identify possible diversity gaps within your current workforce – such as disparities in gender, color, and age
- Develop a sourcing, recruitment and retention strategy that is truly inclusive
- Offer competitive salary with the help of our [2019 Salary Guide](#)
- Beyond salary, make sure you're offering engineering and tech talent the benefits they want

As seen in the results of our survey, the desires and expectations of top tech and engineering talent have experienced a subtle shift – and it's more important than ever that jobseekers and employers are clued in on the changing landscape. For more workforce insights like these, or to leverage our industry expertise, visit modis.com/us.



Methodology

Modis, via a partnership with Allison+Partners, surveyed 1,006 hiring decision makers within technology and engineering in the U.S. Fielding was conducted using the Qualtrics Insight Platform, and panel was sourced from Qualtrics Panel Services. Fielding was executed in November and December 2018.



About Modis

Modis is a leader in STEM professional staffing, consulting, project services, outsourcing and customized workforce solutions, particularly for IT, engineering and life sciences across Europe & North America. With more than 20 years of experience in these fields, the expanded Modis consists of more than 30,000 associates and consultants worldwide and has a network of 20 centers of excellence and delivery centers. Globally, Modis is a part of The Adecco Group, the world's leading HR solutions partner. In Australia, Modis office locations include Adelaide, Brisbane, Canberra, Melbourne, Perth & Sydney.



About General Assembly

General Assembly (GA) is advancing the future of work by equipping individuals and organizations with the most in-demand 21st-century skills. Offering training and assessments in web development, data science, digital marketing, and more, GA is building transparent career pathways for people, and sustainable, diverse talent pipelines for employers. With 22 locations, immersive online offerings, onsite trainings for the Fortune 500, and a global community of professionals nearly 1 million strong, GA is the leading source for training, staffing, and career transitions.