Solving the talent equation

How organisations can attract and nurture the talent required to fill the digital skills gap

Get started
Recruiting people for technical roles is one of the most acute challenges facing organisations and business leaders today – whether they are based in the UK or elsewhere in the world. This skills gap is not new and has been widening for years. Digital technologies are now central to the workflow and business processes of most companies; they shape the experiences and expectations of customers. This trend accelerated in early 2020, during the high-velocity digital transformation triggered by the pandemic. While the global health crisis didn’t change the fundamentals of the skills landscape, it added urgency to addressing the skills challenge.

What has changed during the past few years, though, is what it takes to perform many of these technical roles. There are still many jobs that require a mastery of data science, IT, or software development. But more and more roles can now be filled with workers that have fewer technical skills. Given the right training and the right digital tools, people can now do many productive and creative digital jobs that previously might have required much deeper technical capabilities. And yet, organisations still struggle to find people with the right skill sets. Research from Microsoft and Dr Chris Brauer, Goldsmiths, University of London, shows that an overwhelming majority of UK business leaders (69 percent) say that their organisation is currently facing a digital skills shortage.

This paper aims to help leaders who are struggling to fill digital skills gaps in their teams. It is informed by the experiences of hiring managers across many industries, not just Microsoft. And they all agree: if we complement traditional ways of recruiting with new approaches, then it is possible to find, attract and grow the talent you need to power the digital transformation of your organisation.

We believe that talent is everywhere. It’s the opportunity that needs unlocking.

"It’s exciting to see how technology is transforming the way organisations work. This change, however, requires a new mindset. Organisations have to re-think how they hire people, and with skill sets constantly changing, there must be a shift to a blended talent strategy. Degrees and credentials are still important, but they cannot be the only benchmark for finding talent. Hiring models must tap into non-traditional talent pools, because talent is diverse and can be found in the most unexpected places."

SIMON LAMBERT, CHIEF LEARNING OFFICER, MICROSOFT

---

1 Productive skills are skills that enable workers to create digital tools and processes that can be used by colleagues, customers or consumers.
Several years ago, Microsoft faced a similar talent challenge. As we went through our own digital transformation, we had to rethink not only our systems and processes, but also the very fabric of our culture. We had to change how we think about skills and adapt our approach to recruiting, training, and developing our workforce. It’s not just us who had to make that change. In conversations with managers and recruiters working across many industries, we found that they too had to reimagine who their ideal recruits were and where they could find them.

To plug the digital skills gap, we must change the conversation about what constitutes talent, and how and where we can find it.

We can broaden our recruitment pipeline, by asking ourselves four questions:

If everybody is trying to chase and recruit from the same shallow pool of people with highly developed digital skills, then they may be making the same mistake. This is a simple mismatch between supply and demand, and fighting harder over the same number of people will not help to fill the rapidly growing skills gap. Instead, managers have to start looking for talent in places beyond the obvious.

A YouGov survey of decisions makers at British Small- and Medium-sized Enterprises (SME), which was commissioned for this book, shows that right now nearly a third of companies don’t provide any digital training and hire only people who already have the digital skills they need. Unsurprisingly, more than quarter of companies are finding it difficult or fairly difficult to recruit staff with the right digital skills.²

² Survey conducted by YouGov between 14-16 December 2021. Total sample size was 529 SME decision makers. The figures have been weighted and are representative of British business size.
If we ask these four questions, we bring people closer to the opportunity, broaden our talent pipeline, and recruit in a more inclusive way because we offer people more flexibility, choice and the support they need to discover and develop their own talents.

For some managers this may sound like a risky shift. However, it is simply a response to today’s rapidly changing technology landscape, which is dramatically increasing the pool of available talent.

**Who are we recruiting?**

There is always the usual talent pool of freshly graduated and experienced developers and data scientists that a company can tap into, but to fill the skills gap we have to expand our search. By recruiting staff from a diverse and inclusive range of backgrounds — including, but not limited to age, gender, race, abilities, education, and culture — we can not only fill the gaps, but develop better products and services, because we will gain insights that make it possible to increase access, reduce friction, and deliver more emotional context to the greatest number of people.

**Where are we recruiting?**

Our search can focus on people from the same demographic and a similar university background as our existing IT teams, or we start looking for people from non-traditional backgrounds or circumstances, and in different locations. Are we considering people with great creative or analytics skills, but no deep tech knowledge; experienced workers who are ready to change careers; single parents who prefer working from home; people with disabilities who can use digital tools to meet their full potential; or those who live beyond the immediate catchment area of our organisation’s offices, given that collaboration technologies now make it possible to fully integrate people into teams even if they live much further away?

**How are we recruiting?**

Job adverts searching for digital talent can appear forbidding. They are often filled with jargon and may demand technical qualifications that are way above what the actual job requires. By changing the language we use to search for talent, by putting more emphasis on business and creative instead of pure technical skills, we can tap a much broader talent pool.

**What are we looking for?**

Finally, we have to reconsider the metrics we use to identify or predict success. Research suggests that grades and formal qualifications are not reliable indicators for judging the potential and success of digital talent; our own experience bears that out. A candidate’s cultural fit is much more important, as is their willingness to go on a learning journey that unlocks digital potential. According to a LinkedIn survey, 75 percent of hiring managers find standard CVs insufficient to make a decision. That’s simply because ticking the boxes of formal qualifications will not tell you whether a person is right for a team or a company.
An increasing number of digital tasks can now be performed using technology platforms that require little to no code at all. Simple, drag-and-drop software makes it possible to achieve with a few mouse clicks what used to take weeks of work by highly skilled developers. New low-code solutions like cloud-based automation tools allow companies to leapfrog whole generations of technology evolution and enable everyone, regardless of their digital competence, to productively use the power of digital innovation. This is a technology shift that has yet to reach many SMEs. Our survey suggests that just 32 percent of companies say that their digital tasks can be accomplished with few technical skills, while 31 percent disagree or strongly disagree.

Companies that make use of this new technology environment will find that it fundamentally changes the skills mix that they require — and thus the breadth of the talent pool available to them. Yes, managers should still rank recruits based on their technical qualifications, but they must also

- look for people with higher-level cognitive, creative, strategic and emotional skills;
- ask whether people have the right cultural fit for the company, and
- check whether people are willing to learn new productive digital skills and embrace a learning mindset.

Not long ago, it required ‘rocket scientists’, star developers and data wizards to accomplish fairly simple digital tasks. The skills landscape, however, has changed. The Microsoft study identifies two distinct types of digital skills: productive skills (the technical skills which allow someone to create digital tools and systems) and consumptive skills (those that allow someone to use digital solutions that others have built). The study found that productive skills deliver nearly double the performance of consumptive skills, yet only 17 percent of UK employees currently feel able to create digital tools and systems for other workers to adopt.

Granted, certain business challenges still require the attention of the best technologists. And it will come as little surprise that LinkedIn data and surveys by the World Economic Forum (WEF) show that jobs like Data Analysts, AI and Machine Learning Specialists, and Digital Transformation Specialists are among those where demand is growing the fastest.

These look like roles that are tough to fill. However, during the past few years the technology environment has evolved dramatically. While we are not quite at the point where using digital technologies is as easy as flicking a switch, we are getting close.

When it comes to hiring, traditional digital knowledge — like the ability to code or proficiency in a computer language — may not be a must anymore. Different skills have become more vital, like critical thinking, problem-solving, self-management, active learning, resilience, stress tolerance and flexibility, which is why the WEF has ranked them among the top 10 job skills of 2025.

Organisations that can spot and nurture these talents will become more competitive, creative and better at solving problems.
The opposite is equally likely (and true for any staff, whatever their qualifications): what if you don’t train them—and they stay in their job? Organisations need to realise the benefits of investing in their talent pool. Having a strong learning culture makes them more attractive as an employer and helps them build a successful multi-generational workforce that is underpinned by a growth mindset.

Hiring for potential instead of experience may fill the talent pipeline, but it does not yet solve the digital skills challenge. Organisations – large and small – also need to foster a learning culture in their organisation. They have to encourage a growth mindset among their staff and give them the freedom and opportunity to learn new digital skills as part of their day-to-day work. In fact, given the speed of digital innovation, organisations are only likely to succeed if they foster a growth mindset for all their employees. Digital skills cannot be acquired and credentialled once; they evolve through life-long learning. Successful companies help their employees grow into their digital roles, with training on the job and the certifications that go with it.

Of course, most companies won’t have internal training academies that can provide the full range of required digital skills. Our survey shows that only a quarter of SMEs in the UK offer internal training. More than half (52 percent) expect their staff to take the initiative and rely on “self-learning on the job”. However, there are many tech companies – including Microsoft – that offer a broad range of courses that help employees in other industries to gain the skills and qualifications they need. However, according to our survey, only 20 percent of SMEs are making use of such programmes.

Small and medium-sized businesses can also tap into the programmes supported by the Apprenticeship Levy. And online training makes it possible to seamlessly integrate learning into the normal working day, or schedule it for a time that’s best for the personal schedule of your workers.

Some managers, however, fear that investing a lot in the training of their own staff will simply make them attractive recruitment targets for competitors. The opposite is equally likely (and true for any staff, whatever their qualifications): what if you don’t train them—and they stay in their job? Organisations need to realise the benefits of investing in their talent pool. Having a strong learning culture makes them more attractive as an employer and helps them build a successful multi-generational workforce that is underpinned by a growth mindset.

Organisations are about three things: culture, culture and culture. And culture is about relationships. So when you hire, check whether a candidate is a good fit for the team and company, and whether they add diversity. We know that teams that are more inclusive also perform better. Technical skills are important, of course, not least for a company like Microsoft. But they can be learned, and – in many cases – can be learned better on the job working alongside colleagues. That’s why it makes sense to look firstly at whether potential recruits have other great skillsets, like creativity, strategic thinking and motivation to learn.

This works both ways. We know that having a learning culture is a great differentiator for Microsoft as an employer. And that’s why we put so much emphasis on continued learning and personal growth. We want employees to be able to try new things in an inclusive space that invites diversity of thought across the business.

Maybe it’s the tech industry, but we see in many roles that employees don’t want a job for life anymore. They want to move around and gather a range of experiences. That’s actually a good thing. Give them the opportunity to move internally, or if they really want to leave, make sure their exit is supported. If your culture is right, they will tell others about the great time they have had working with you or they will come back soon – with the added benefit of new experiences and skills.

CLAIRE LOGAN, HUMAN RESOURCES DIRECTOR, MICROSOFT UK
Build, borrow, buy?
Finding the best route to digital talent

Organisations that are ready to open up their talent pipeline, will ask themselves next where they can hire the right staff. Where can they find people from highly diverse backgrounds, or who are recruited for a digital role much earlier or much later in their career than has been done before?

Put simply, the options are to build, borrow or buy digital talent.

To find the best route to hiring digital talent, managers should start by re-examining their talent mix. Which skills does their workforce really need as the organisation goes on a digital transformation journey? Which can be learned, and which have to be bought in fully formed?

Buying digital talent – by recruiting or poaching from the traditional talent pool – is certainly an option, but while it delivers instant skills, it can be costly and may not provide the best cultural fit.

It can be more efficient – both in terms of cost and productivity – to build your own digital team. And that may include borrowing existing talent from across the business, helping them to develop new skills. There are many ways to achieve that, and Microsoft offers a number of initiatives to help. For instance, Microsoft Learn provides interactive, step-by-step content, designed to teach the skills needed to solve every day technical and business challenges.

And since June 2020, Microsoft and LinkedIn have helped more than 1.6 million people in the UK and 30 million worldwide gain digital skills through free online courses available at opportunity.linkedin.com.
Attract internal talent

Understanding how a company works and what makes it tick is often the most difficult skill to acquire. That's why it can be more efficient to attract, find or redeploy talent internally. Many organisations are teeming with creative thinkers that never thought of themselves as digital talent. Find and help them to join the team that is shaping the digital future of your company; it will inspire loyalty and infuse the digital team with insider knowledge that simply can't be taught.

Find career switchers

If you can't find them inside, try to attract talented people elsewhere who may be interested in a career switch. You can take their industry knowledge and talent and complement them with the digital skills that can be taught on the job.

Use apprenticeships

To grow talent, you should consider a 'hire, then skill' approach. Apprenticeships are a fast-track way of putting staff on a twin-track of learning – how your company works and for the digital skills you need.

Use bootcamps

'Skill, then hire' is an alternative approach. Great places to find talent are Bootcamps that offer fast-track digital training. This may also be a good opportunity to find staff from a broad range of backgrounds, which could be a way of bringing much-needed diversity into a company.

Check out training organisations

'Try before you buy' is another potential way for sourcing digital talent. More and more recruitment services now offer training academies, while training academies are turning themselves into resourcing businesses. Finding new staff talent here may be more expensive than the internal skilling, apprenticeship or bootcamp approach, but it could reduce the risk of your investment in new digital talent.

Expert view

Talent isn't scarce. In fact, it's abundant. When organisations struggle to find the right recruits, it's usually because they evaluate candidates the wrong way. This is usually a data problem, especially for technology hires. They don't use the right markers for success. To predict whether a candidate is a great fit for your company, don't check their knowledge of Python and C++, their Excel and database skills or which university they went to. Instead, first look at your own organisation's culture and understand what makes people thrive. Next, analyse what parts of the job can be learned, and whether this can be built into a career pathway. Identify people with the right critical thinking skills instead of tech credentials. You will instantly realise that your talent pool is much broader than you thought, and now can hire people that are a much better cultural fit.

So go out and cast your net wider. Find people who didn't realise they are a good fit for a technology job, and give them the toolset to build a digital career. You may even find them in your own company. And you don't have to provide all the training yourself. Especially SMEs can tap into a broad range of training programmes supported by the government and technology companies like Microsoft.

ROGER PHILBY, FOUNDER, THE CHEMISTRY GROUP
Of course, adopting a hybrid workplace is not an overnight process; it requires examining, and in some cases, reimagining the workplace culture. New tools and processes may be needed to support employees. In some cases, this might mean helping people to find the right balance — e.g. reminding them that the digital economy is not about being ‘always on’, that creativity is nurtured by digital breaks, and that digital tools have an ‘off’ button. In other cases, it might mean investing in opportunities for employees to socialise virtually, or benefits and perks that help make remote working more comfortable and efficient, like stipends for home office furniture.

While the hybrid workplace may not be for everyone – especially people who face space constraints at home – it will offer a huge personal value for others, especially when their family circumstances require them to work in a highly flexible way.

Data suggests that the hybrid workplace can be a powerful differentiator for UK organisations. A recent report from Microsoft and the Chartered Institute of Personnel and Development (CIPD) called *Work Smarter to Live Better* found that more than half of UK workers feel that hybrid work has given them a better work/life balance and that they feel happier (57% and 56% respectively).

Hiring talent is not a one-way street. Organisations also have to offer potential recruits – whether they are found internally or externally – a value proposition that meets the expectations of a generation of workers who since 2020 had to radically reorganise their working lives: the hybrid workplace.

Before the pandemic, work was often defined as working in a shared, consistent, company-owned space for a set number of hours. We live in a new ‘hybrid’ world of work that redefines many aspects of the employee-employer relationship, such as flexibility, remote working, and being spread across geographies and time zones.

Data suggests that the hybrid workplace can be a powerful differentiator for UK organisations. A recent report from Microsoft and the Chartered Institute of Personnel and Development (CIPD) called *Work Smarter to Live Better* found that more than half of UK workers feel that hybrid work has given them a better work/life balance and that they feel happier (57% and 56% respectively).
In thinking differently about talent, leaders in 2022 have the opportunity to build more inclusive, diverse and innovative digital teams. You can grow your own talent – either by offering your existing workforce the opportunity to switch into a digital career, or by bringing in fresh talent through apprenticeships, bootcamps or training academies.

All you have to do is make a clear assessment of the digital skills mix you need today, for the new digital tools that make people productive, even without deep technological skills.

"Every job will increasingly require digital skills. And in the next five years, nearly 149 million new tech jobs will be created. Talent is everywhere, but opportunity is not," argues Satya Nadella, the Chief Executive of Microsoft.

Technology is rapidly changing the profile of the digital skills required for the jobs of today – and the future. But technology is also making it easier than ever to be digitally productive.

As Clare Barclay, the Chief Executive of Microsoft UK puts it: "Closing the digital skills gap is one of the biggest challenges for UK plc, but it’s actually also a challenge that we know how to overcome: all we have to do is expand our search for talent and give our organisations a growth mindset that fosters a culture of learning."
To discover more, please visit
aka.ms/ukdigitalskills