

Sponge.



INSIGHTS REPORT 2022

Technology:

Leading insights for L&D
professionals in the sector.

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“Today’s L&D strategy needs to align with enterprise-wide needs, which requires digital acumen. The hybrid remote workforce necessitated new applications for employees’ use. L&D leaders must ensure that employees have access to more technology-oriented training to grow their technical skills. In addition, core non-tech skills – communication, creativity, problem solving, critical thinking and cultural understanding – which complement technology skills, are imperative for grooming future leaders.”

REGINA NOWLAN

SENIOR DIRECTOR OF LEARNING STRATEGY,
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Introduction.

As a 2020 report from McKinsey found, COVID-19 sped up the adoption of digital technologies by several years.¹ From the requirement to work remotely, and the continued prevalence of hybrid work, to the need to ‘track and trace’ the virus, tech became one of our greatest weapons to deal with the pandemic’s disruptions.

Two years later, the global tech sector continues to grow.² In the UK, nearly three million people (9% of the workforce) are employed in tech, and IT-related positions make up 13% of all UK job vacancies.³ Growth is being experienced across the country and money talks – data scientists have seen their average salary increase by 31% over the past two years.⁴

However, despite this good news, there is a sense that the tech sector could fall victim to its own success. Reports from the Financial Times and Economist, from March and May 2022 respectively, warn of the tech bubble ‘bursting’.⁵ At the same time, the rapid pace of growth, during a time of social unrest because of COVID-19, has created unprecedented skills gaps within the sector. Even within the UK, despite the growth and growing salaries, 66% of digital leaders are unable to keep up due to talent shortages.⁶

Clearly, within tech, the consolidation of teams should be a major priority. Individuals should be being drawn to the sector to plug skills gaps, whilst those currently in roles need continuous learning to keep up with the speed of change. Despite the rise of automation, people still form the backbone of the sector, and are critical in driving forward innovation. However, in 2022, many tech organisations have lost sight of this and are facing skills gaps as a result. A so-called ‘Talent Transformation Strategy’ to plug these gaps ought to be an industry priority, but only 15% of tech organisations predict implementing one in the next two years.⁷ Across roles in DevOps, customer experience, cloud, automation, platforms and products, data management, and cybersecurity and privacy (the seven tech ‘battlegrounds’ identified by McKinsey), L&D practitioners must offer practical solutions and deliver people-focused learning, which is rooted in an organisation’s strategic aims.

1 McKinsey & Company, **How COVID-19 has pushed companies over the technology tipping point—and transformed business forever**, October 2020.

2 Forrester, **Forrester: The Global Tech Market Will Experience Robust 6% Growth In 2022 And 2023**, March 2022.

3 Business Leader, **UK tech boom sees one in eight job opportunities in digital sector**, September 2021.

4 Business Leader, **UK tech boom sees one in eight job opportunities in digital sector**, September 2021.

5 Financial Times, **‘Tech wreck’ looks more like another dotcom bubble bursting**, March 2022;
The Economist, **Tech bubbles are bursting all over the place**, May 2022.

6 Department for Digital, Culture, Media & Sport, **Quantifying the UK Data Skills Gap – Full report**, May 2021.

7 McKinsey & Company, **How companies can win in the seven tech-talent battlegrounds**, October 2020.

What is in this report?

This report covers three core insights from the tech industry, gleaned from Learning Technologies 2022. The first, focuses on the danger of organisational skills gaps and the role that L&D practitioners can play in closing them. It also looks beyond upskilling, although this is important, to assess how L&D is key to retaining talent, thereby preventing the further widening of skills gaps within an organisation.

The second insight focuses on soft skills, which, until recently, have been somewhat neglected within tech. As Ted Vaughan, co-author of 'Culture Built My Brand' (2021) writes: "In the past...hard skills mattered more than soft skills. But given today's accelerated pace of change and disruption, your organization needs multifaceted, agile people".⁸ A key role for any L&D practitioner working within tech must be to support this added focus on soft skills. The likes of problem solving, critical thinking, and decision making are of perennial importance within the sector. Similarly, skills related to resilience and change management are vital for allowing employees to weather the sector's disruptions.

Finally, the third insight focuses on the importance of data and analytics to the deployment of learning within tech. The fundamental significance of data to the sector means that any L&D initiative lacking in sufficient data analytics won't be refined to meet an organisation's requirements. Practitioners must understand this, and use data to match content to learners, and to clearly demonstrate the learning's ROI to organisational decision makers.

Who is this report for?

This report is aimed at key L&D decision makers within the tech sector. It combines both the broad, industry-wide changes that have occurred as a result of COVID-19, and how they have impacted individuals within the sector.

8 Forbes, **Upgrade Your People, Then Your Technology**, June 2022.

INSIGHT ONE

The 'Great Resignation' and digital skills gaps pose an existential threat to talent retention and continued sector growth.

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The challenge.

The speed of technological advancements during and after COVID-19, and the subsequent 'Great Resignation', has drastically impacted the tech sector, creating a talent shortage across the industry. For example, it is predicted that the gap between qualified cybersecurity professionals and unfilled positions will soon reach 1.8 million.⁹

Put simply, tech has a talent pipeline that can't keep up with the speed of technological change. Furthermore, without drastic action, the situation will likely worsen. To meet these challenges head-on, L&D practitioners must look beyond increasing their spending and take a more strategic approach. As shown by the example of TikTok, who dissolved its talent development department due to 'limited practical value...[and] disconnect from the company's needs', L&D must be closely aligned with the wider organisation.¹⁰ Doing so enables practitioners to show what's working and what needs fine tuning or pruning.

The context.

Given the constant innovations within tech, continuous learning has been established within the sector. Practitioners should capitalise on this but look beyond the short-term. What are the emerging trends? What are the skills gaps that might emerge further down the line? They should also fight against misconceptions about who needs to learn within the sector. For example, some would assume that younger, more tech-savvy employees do not require the same levels of training as other employees. The fact is that the change of pace is so rapid that the need to learn is critical across the industry.

Practitioners should also look to upskilling existing talent – a cheaper and less risky alternative to hiring externally. On average, the process costs \$20,000 per employee, compared to hiring costs of \$30,000 for recruitment alone, plus new hires are two to three times more likely to leave a role.¹¹ When it comes to external hiring or internal upskilling, L&D should work with experts within the organisation to ensure the process is as streamlined as possible. Rather than leaning on an HR department that might have limited tech knowledge, involve the experts to get organisation-wide buy-in and save resources.

⁹ Training Mag, [Closing the Skills Gap with Learning and Development](#), January 2022.

¹⁰ Unleash, [TikTok owner ByteDance dissolves talent development](#), January 2022.

¹¹ McKinsey & Company, [How companies can win in the seven tech-talent battlegrounds](#), October 2020.

Considerations.

It is also important to consider the role L&D can play in retaining talent. As with other industries, tech has felt the squeeze of the Great Resignation, with many in the sector being deemed 'flight risks'. According to one survey conducted by CGS in 2021, 32% of respondents would leave an employer because of a lack of opportunities to gain new skills, while 35% desired technology training.¹² According to Hays' 'What People Want' report, salary is an important consideration when accepting a job in tech – making up 49% of the decision. However, in the same survey, 71% of IT professionals said they would take a pay cut for the perfect role.¹³ This suggests that additional benefits, such as L&D opportunities, can play an important role in attracting and retaining tech talent.

It is also important to consider the potential role apprenticeships can play in closing organisational skills gaps. We are already seeing this in IBM's commitment to upskill 30 million people by 2030 through more than 170 new academic and industry partnerships.¹⁴ However, across the UK, apprenticeships declined by a fifth between 2015 and 2019, and this downward trajectory has been exacerbated by COVID-19.¹⁵ A 'joined up' policy between governments, organisations, and training providers is required to reverse this trend and ensure that young people can specialise in tech-based skills from a young age.

More broadly, although upskilling is essential, it should not be the only policy employed by a tech organisation to close its skills gaps. With innovation being essential to the industry, L&D should encourage organisations to broaden their search for employees beyond their traditional talent pools. This has been made easier by the uptake of remote working by many in the sector, meaning that tech organisations can look further afield for talent. Practitioners can lead the charge in diversifying tech, which is still lagging behind other industries, to bring in additional talent, plug skills gaps, and boost innovation.

How Sponge can help.

At Sponge, we invest time and effort into understanding organisational skills gaps on a macro and micro level. Combining sector-wide knowledge and specific use cases, our LEXCs (Learning Experience Consultants) work carefully to understand the bespoke needs of an organisation. We can offer a full range of solutions, but above all we value the importance of learner engagement. Only by truly understanding where the gaps are, and developing a clear strategy to close them, can L&D help to future-proof tech organisations.

12 Ian Barker, [Why learning and development are key to retaining tech workers](#), January 2022.

13 Forbes, [What IT Professionals Want](#), January 2018.

14 IBM, [IBM Commits to Skill 30 Million People Globally by 2030](#), October 2021.

15 National Foundation for Educational Research, [Putting Apprenticeships to Work for Young People](#), June 2021.

INSIGHT TWO

Developing a soft skills learning strategy is essential to attracting new talent, and creating more inclusive and resilient teams.

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The challenge.

As stressed in Deloitte's 2020 post-COVID-19 report, 'build[ing] a resilient, emotionally intelligent, and empathetic workforce' is 'the new mandate of L&D'.¹⁶ Traditionally, soft skills have been neglected within tech, however the rapid pace of change requires a change of tact. Resilience is essential to weather the sector's disruptions, adaptability is needed for any employee to be upskilled into a new role, and leadership and management are must-haves so that knowledge can be transferred. However, L&D faces a challenge in delivering this – the complex nature of tech has led to siloed cultures developing in many organisations. Practitioners must demonstrate the vital importance of soft skills in supporting an organisation's present and future needs.

The context.

Soft skills are an essential part of a manager's toolkit to support and encourage the best from their team. Without skills around communication, mentoring, and collaboration IT managers are unable to support their teams, which, in turn, has a knock-on impact on the wider organisation.

At the same time, soft skills also hold the key to building more diverse teams – a major priority in the tech sector. Put simply, diverse teams are more successful teams. If we all think the same, there is no challenge. If we do what we've always done, we will get what we've always got. To counteract this, diversity and unconscious bias training are vital, but practitioners should also encourage the honing of listening and communication skills. Furthermore, the benefits of this for an organisation are immeasurable. As well as the moral obligation of giving everyone 'a seat at the table', creating an environment where employees are listened to and given opportunities to learn creates a more pleasant workplace, which is fundamental to retaining tech talent within a competitive industry.

¹⁶ Deloitte, **Future of learning in the wake of COVID-19**, January 2021.

Considerations.

It is important to consider the personalised nature of soft skills. To support this, organisations should look to give employees considerable autonomy in deciding the ‘what, where, when, and how’ of their learning. Businesses are becoming more open to the idea of learning being placed in the hands of the individual learner. There has been a shift in recent years which put much more focus on people and with that has come increased personal ownership of their development.

Tech organisations should also consider how micro-learning can be used to teach soft skills. COVID-19 has seen learning become more digital, shorter, and more varied, with a bite sized approach to learning consumption taking centre stage.

Ultimately, nowadays we have a much wider range of media at our disposal. L&D practitioners must work with organisations to carefully select the type of content best suited to their overall strategy. Rather than being drawn-in by the latest technologies, it is important to assess these things ‘in the round’. Begin any needs analysis with the learners themselves. Ask yourself: What do they want? How do they want it? Why is it needed? What does success look like? And how are we measuring it?

How Sponge can help.

Sponge’s Skill Pill micro-learning series offers a number of customer-focused titles that are ideally suited to boosting soft skills within tech. Covering topics ranging from leadership, management, and communication, to diversity and inclusion, this content is of an exceptionally high standard and is carefully mapped to our clients’ unique competency needs. However, we are also aware of the tendency of seeing low engagement rates when it comes to off-the-shelf content. It is sometimes the case that content is uploaded onto an LMS (Learning Management System) and left for employees to ‘graze’ on. To combat this, any content launch is supported by a range of marketing assets to drive up engagement, with regular usage reports so that you can see the impact of the learning on your teams. Skill Pill also offers a collaborative learning widget, which enables dispersed teams to watch the same content together – creating social learning.

INSIGHT THREE

Without a robust analytics platform that makes sense of learner data, your learning strategy will fail.

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The challenge.

With the exponential growth of the tech sector, it is vital that organisations do not neglect the importance of learner data for any L&D initiative. L&D data has a knock-on impact on the other two insights in this report. Put simply, how can a tech organisation understand its skills gaps, or effectively deploy soft skill content, without an analytics engine capable of matching learners with content?

The context.

As Julia Satov writes in Chief Learning Officer: “The tech industry is advancing both theoretical and applied learning at a faster rate than Apple can push out an iOS update”.¹⁷ The speed of technological developments, necessity to integrate data, tech, and software, and the blend of technology, maths, and business analysis, has sparked strong learning cultures across the tech sector.

At the same time, there is a mutual understanding that developers need designers, designers need marketers, marketers need UX researchers, and researchers need data scientist researchers. As Satov notes, “any of those candidates who has learned the others’ value becomes more valuable to the organisation”.¹⁸ L&D has developed as a way of understanding the role of other employees within a tech organisation and is a key method to preventing a siloed work culture from developing.

Although learning is a priority within the tech sector, the analytics that sit behind the content have been neglected. Effective learning analytics will allow you to get to know your learners: Where are they focussing their development? What resources are being used and when? You can then use this information to dig deeper, connect with your learners and discover the why and the how. Data can bring learning together and uncover correlations between activities. Being able to demonstrate this will not only show the value being added but also reveal future opportunities.

¹⁷ Julia M. Lewis Satov, **Agile by fire: how the tech industry is transforming learning**, July 2020.

¹⁸ Julia M. Lewis Satov, **Agile by fire: how the tech industry is transforming learning**, July 2020.

Considerations.

As data takes on an even greater role in the consumer journey, consider how it can be incorporated into learner pathways. As Regina Nowlan, CGS's Senior Director of Learning Strategy, notes: "L&D professionals must go beyond the old, one-dimensional format and tools. Today's business environment requires delivering learning with layered technology".¹⁹ This layering of different types of content requires the support of a strong data analytics engine.

As with any use of data, it is important to consider the possibility of information overload. Therefore, you should start with the end in mind, agree on what data you will be looking to extract, and limit yourself to three or four powerful indicators. It is also important to think 'business first' and focus on metrics that align with the organisation's priorities. Rather than assuming, L&D should work in tandem with key organisational decision makers to ensure learner data can be a useful tool for aiding an organisation's strategic direction.



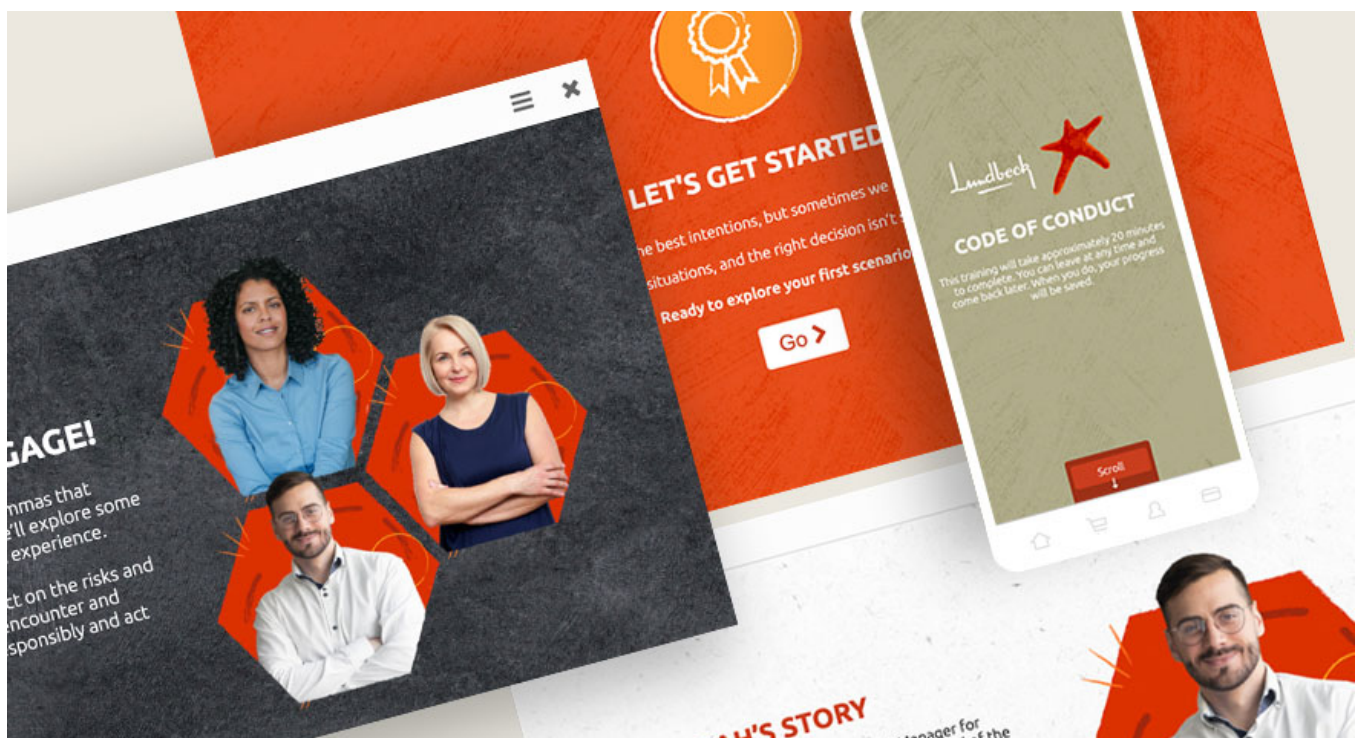
19 Ian Barker, [Why learning and development are key to retaining tech workers](#), January 2022.

How Sponge can help.

At Sponge we involve ourselves in the early stages of a client relationship and provide ongoing support. A key element of this is our data processing technology, which can be inlaid during the build of custom learning programmes and wrapped around a learning solution to maximise the data output. Our solution provides a single, collated view of risk, behavioural change, and culture. It enables us to create a culture of continuous improvement with our clients, iterating content and focussing the learning to deliver concise support when it's needed most. Within tech, L&D practitioners can rapidly make sense of critical data and take evasive actions where needed.

Sponge's work with global pharmaceutical organisation Lundbeck demonstrates the ability to derive insights from learner data. Prior to partnering with Sponge, Lundbeck's LMS did not capture the required levels of data. In response, Sponge deployed its xAPI-driven Learning Record Store (LRS) that dives deep into data, to work in tandem with the LMS. This allowed for the critical risks to the business to be identified, by pinpointing the areas where employees needed more clarity and confidence.

Rather than top-level summaries, Sponge's data offering focuses on question-level insights, extracting detailed data on learner behaviour to offer insights into how your online training is performing. By observing the way learners engage, down to specific questions, topics, and tasks, practitioners can get a much more targeted view of how well their learning interventions are performing. These sophisticated insights show where learning is making the most impact, across any learning topic, enterprise-wide.



[Lundbeck case study.](#)

Next steps for L&D practitioners in the tech sector.

The tech sector is booming, but behind the growth sit widening technical and soft skills gaps as well as fragile L&D strategies. The challenge for practitioners is to ensure that learning initiatives are prioritised within a rapidly advancing and increasingly complex sector. L&D cannot afford to become a siloed department. Instead, it must look to incorporate experts into a programme of upskilling, broaden the search for talent, boost diversity, stress the importance of soft skills, and leverage the sector's love of data to create an analytics-driven L&D roadmap. To do this, practitioners need the buy-in of the entire tech organisation, to support the organisation's future planning and ultimate longevity.

With over ten years' experience delivering quality learning programmes to large brands such as PayPal, Google, Snap, Atlassian, Epic Games, Salesforce, and a social media giant, Sponge has a proven track record of developing a range of solutions for the tech industry. As thought leaders, we take it upon ourselves to follow the latest developments within tech and try to remain ahead of the curve when it comes to the industry's ongoing digital transformation. Our Learning Record Store (LRS) uses high levels of personalisation to target learner populations, and our consultative approach translates learning metrics into company-wide insights.

For more information or to book a call, please contact us.

[Contact us now!](#)

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