



Report: The evolving hiring landscape

– A shift towards apprenticeships for the science and technology industries

TIRO



Introduction

The rapidly evolving UK business landscape presents unique challenges for organisations in hiring and early career development. Factors such as technological advancements, global competition, demographic shifts and the long-term impact of the COVID-19 pandemic contribute to the complexity.

To address these challenges, organisations are adapting their hiring practices, in particular emphasising early career development in light of issues with the retention of staff and legacy planning. Increasingly, the strategy includes apprenticeships and mentorship programmes.

This report presents the findings of a comprehensive survey conducted among business leaders, including a significant portion in the science and technology industries, combined with valuable insights gathered from a thought-provoking roundtable discussion.

Through this process, we were able to engage leaders from various organisations operating at the forefront of scientific and technological innovation, providing a unique glimpse into their strategies and challenges.

Their insights, coupled with the data-driven analysis, form the foundation of this report, enabling us to deliver actionable insights and practical recommendations for organisations seeking to thrive in the evolving hiring landscape.



Executive summary

In June 2023, Tiro conducted a comprehensive survey of HR and business leaders and hosted a roundtable discussion to gather insights on evolving hiring practices.

With the current and future picture in the science and technology sectors a key element, Tiro surveyed leaders from the industry and engaged experts, recruiters and leading professionals in a roundtable event.

Key findings from the survey include:

- Over the past three years, 71% of businesses have actively recruited university graduates, demonstrating their continued importance in the talent acquisition process.
- The adoption of apprenticeships has seen a significant increase, with 38% of businesses hiring level 6 apprentices through degree apprenticeships, 37% recruiting level 4-5 apprentices via higher apprenticeships and 30% employing level 3 apprentices through advanced apprenticeships. Overall, 70% had hired one type of apprentice in recent years.

Over the past three years

71%

of businesses have recruited university graduates

38%

hired level 6 – degree apprenticeships

37%

hired level 4-5 – higher apprenticeships

30%

hired level 3 – advanced apprenticeships

70%

hired one type of apprentice in recent years

- Businesses expressed several concerns related to talent management, including retention, recruitment challenges, addressing skills gaps, managing remote working expectations, attracting candidates from diverse backgrounds, meeting wage expectations and building a future talent pipeline.
- Degree apprentices were recognised for their diligence, eagerness to learn, enthusiasm and reliability. Similarly, other apprentices were acknowledged for possessing similar strengths
- Approximately 46% of businesses anticipate an increase in their overall recruitment, while 40% expect to expand their hiring of apprentices.
- Notably, 59% of respondents said they were likely to transition a portion of their graduate scheme cohort into degree apprenticeships – rising to 64% in the science sector – indicating a growing recognition of the value and advantages associated with apprenticeship programs.
- Driving this, 27% of decision makers in science say the sector would benefit from more non-university routes into jobs.

These findings demonstrate the dynamic changes occurring within the hiring landscape in the UK, particularly in the rapidly evolving science and technology industry. Businesses are increasingly embracing apprenticeships as a valuable pathway for early career development, alongside their continued recruitment of university graduates.

By leveraging apprenticeships and effectively addressing talent management challenges, businesses can attract top talent, bridge skills gaps and cultivate a resilient workforce capable of driving future success.



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The hiring landscape: Findings and analysis

The survey results indicate that university graduates continue to be actively recruited by 71% of businesses, highlighting their ongoing significance in the talent acquisition process.

However, the data also reveals a notable shift in hiring preferences towards apprenticeships. A considerable portion of businesses are embracing this alternative pathway for early career development.

Among the surveyed businesses, 38% have chosen to hire level 6 apprentices through degree apprenticeships, showcasing the growing popularity of this programme. Furthermore, 37% have opted to recruit level 4-5 apprentices via higher apprenticeships, while 30% have employed level 3 apprentices through advanced apprenticeships.

These findings underscore the diverse range of apprenticeship opportunities available to businesses, allowing them to cultivate talent with varying levels of expertise and qualifications. Across the board, 70% of businesses have hired at least one type of apprentice in the past 3 years.

This shift in preference towards apprenticeships signifies a recognition of the value and benefits associated with this form of early career development. The increasing parity between the percentage of apprentices hired and that of university graduates indicates a changing mindset among businesses.

Employers are acknowledging the unique blend of practical skills and academic learning that apprenticeships offer, making them an attractive option for cultivating a skilled and adaptable workforce.

The statistics highlight the evolving landscape of early career hiring, where businesses are embracing apprenticeships as a complementary approach to recruiting university graduates. This strategic shift enables organisations to tap into a broader pool of talent and harness the benefits of apprenticeship programs, fostering the development of highly skilled individuals who possess both theoretical knowledge and practical expertise.

In the sciences, there is acknowledgment that a wider range of routes into roles could be beneficial – 27% of decision makers say the sector would benefit from more non-university routes into jobs. This echoes existing academic research on the link between challenges in plugging skills gaps and the number of qualified candidates.

Smith and White (2019) found that despite the high quantity of STEM undergraduates in the UK, there remain unfilled vacancies in the sciences, indicating that issues such as STEM graduates ending up going into other fields, or a lack of suitable technician-level candidates may be having an impact.

Mark Cameron, CEO of the 5% Club said during the latest Tiro Summit on science and technology recruitment “There is a danger that the engineering and scientific mindsets are highly desirable in other spheres, and if engineers and pharmaceutical professionals are lured away into finance or marketing roles, for example, that creates major skills deficits for our sector. Attracting new people into our sector to replace an aging workforce, and then keeping them is a major challenge.”



The increasing trend of hiring apprenticeships in our industry reflects a changing mindset among businesses.

In the fast-paced world of science and technology, organisations are seeking a unique blend of practical skills and academic learning to cultivate a highly skilled and adaptable workforce.





Concerns for businesses: Addressing talent management challenges

In the highly competitive industry, and more broadly across the UK business landscape, organisations face substantial challenges when it comes to hiring new talent.

Talent shortages, fierce competition for skilled individuals, shifting workforce dynamics and evolving candidate expectations all contribute to the complexity of the hiring landscape. Moreover, businesses report struggling with skills gaps, attracting a diverse pool of candidates and effectively managing the recruitment process.

According to the survey findings, a significant proportion of businesses expressed concerns in several areas of talent management:

- **Retention of staff:** 67% of businesses indicated some level of concern about retaining their existing workforce, highlighting the importance of employee retention strategies in a competitive market.
- **Recruitment of staff:** Likewise, 67% of businesses – rising to 69% in the sciences – expressed concerns about recruiting new talent, indicating the challenges they face in attracting qualified candidates to their organisations.

- **Filling skills gaps:** A considerable 72% of businesses raised concerns about addressing skills gaps within their workforce, indicating the need for targeted training and development initiatives.
- **Managing remote working expectations in new hires:** As remote work continues to be prevalent, 66% of businesses expressed concerns about effectively managing the expectations of newly hired employees in remote work settings.
- **Hiring staff from more diverse backgrounds:** Diverse and inclusive hiring practices are a priority for businesses, with 56% expressing concerns about attracting candidates from diverse backgrounds and ensuring a diverse talent pool.
- **Meeting wage expectations from new hires:** Wage expectations are an important consideration for businesses, with 67% expressing concerns about meeting the salary expectations of new hires in a competitive market.
- **Length of time taken to hire:** 66% of businesses voiced concerns about the duration it takes to hire new employees, highlighting the importance of streamlining recruitment processes and reducing time-to-hire.
- **Building a future pipeline of talent:** Looking ahead, 69% of businesses expressed concerns about developing a sustainable pipeline of talented individuals to meet their future workforce needs.
- **Attracting more applicants:** 65% of businesses indicated concerns about attracting a higher volume of candidates, suggesting a need for enhanced employer branding and recruitment strategies, supplemented by a strong early careers strategy enabling staff to rise through the ranks. Those in the sciences were more likely to be concerned about attracting candidates (70%).

- **A lack of workplace experience in candidates:** Recognising the importance of practical experience, 70% of businesses expressed concerns about candidates lacking workplace experience, emphasising the value placed on relevant work-based skills.

When it comes to early talent specifically, one notable finding from Tiro's research is that 29% of respondents have observed a high turnover of early career hires within a couple of years. This suggests a potential challenge in retaining young professionals and highlights the importance of implementing effective strategies for employee engagement and development. Organisations may need to focus on creating a supportive and nurturing environment to foster long-term commitment from early career hires.

"Lisa Massey, HR director at SOCOTEC and a participant in the Tiro Summit on science recruitment said "When you're hiring for early careers roles authenticity is so important. Young people especially will see through the hype very quickly, and will want to see the authenticity that goes with the front page. It's really important, especially if you work in an organisation without strong name recognition, to work hard to have a whole value proposition and to be able to offer candidates something that perhaps goes beyond the first contract."

Another interesting finding is that 27% of respondents believe there is intense competition for early talent in the current market. This perception underscores the need for businesses to differentiate themselves and offer attractive opportunities to attract and secure top talent. Employers must develop robust recruitment processes to stand out in a highly competitive talent landscape.

Furthermore, 27% of respondents think that early career candidates are more likely to lack workplace skills due to the impact of COVID-19. This finding reflects the acknowledgment of the pandemic's influence on the skill development and preparedness of young job seekers.

Employers may need to provide additional training and support to bridge any skills gaps and help early career hires succeed in the evolving work environment.

Annette Lewis, UK Operations Training and Development Lead at AstraZeneca and participant in the Tiro science recruitment summit said "One of the challenges when we're looking to recruit people in early careers is workplace readiness. We're having to work with these young people in terms of how they work as part of a team and how we like to communicate and collaborate at AstraZeneca. Flexibility is all important for the people within this talent pool, but because in-person collaboration is crucial to us we see it in a slightly different way. We want to hire people who want to be part of the excitement of working in our industry."

An additional finding worth noting is that 24% of respondents prioritise educational achievements over skills when hiring early talent – rising to 31% in the sciences. While qualifications have value, this perspective may mean that employers are regularly missing out on future stars who have all the foundational skills to succeed long-term but may not have opted for the usual academic paths.

This is particularly important when considering the wider landscape of diversity in the workplace, both from a racial and socio-economic perspective. According to Universities UK, white students are more likely than non-white students to graduate with higher-level degrees, and recent DfE data found that students from areas with higher levels of deprivation are more likely to drop out of university. Employers must consider a balanced approach that values both academic achievements and relevant skills to ensure a well-rounded workforce.

One participant shared their view on this topic, stating, "While academic qualifications are important, we should also recognise the value of practical skills and real-world experiences. Early career hires often bring fresh perspectives and a willingness to learn, which can be valuable assets for our organisation."



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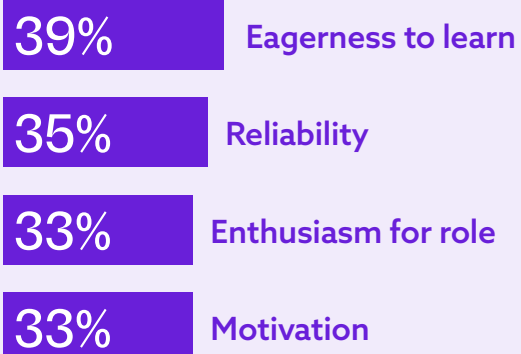
Perceived strengths and areas of improvement for early career hires

According to the survey results, businesses identified several key strengths in different types of early career hires, highlighting the diverse skill sets and qualities they bring to the table.

Degree apprentices were recognised for their eagerness to learn, with 39% of businesses acknowledging this quality. Their reliability (35%), enthusiasm for the role (33%) and motivation (33%) were also noted.

A roundtable participant remarked, "Degree apprentices bring a strong work ethic and a genuine thirst for knowledge, which greatly benefits our organisation." The combination of first-hand experience gained through apprenticeships and the academic knowledge via degree programs equips them with a well-rounded skill set.

Strengths of degree apprentices according to businesses



Other apprentices at levels below level 6 were commended for their reliability (33%), eagerness to learn (32%) and enthusiasm for the role (29%).

Roundtable participants emphasised the value of their commitment and willingness to adapt, with one participant stating, "Other apprentices bring a fresh perspective and a willingness to roll up their sleeves and tackle any challenge." Their practical skills and experience gained through apprenticeships make them valuable assets to organisations.

University graduates were described as eager to learn (40%), enthusiastic about the role (34%) and motivated (34%). Roundtable participants praised the breadth of knowledge and critical thinking skills that university graduates bring to the table. One participant stated, "University graduates bring a solid foundation of academic knowledge and critical thinking abilities, which can greatly contribute to our organisation's growth."

Their ability to apply theoretical knowledge to practical situations and their analytical thinking skills make them well-suited for complex roles. However, they can lack some soft skills, being more likely to be described as impatient (19% vs 12% among level 6 apprentices) and lacking teamwork (16% vs 8% among level 6 apprentices) than their degree apprentice counterparts.

This analysis highlights the strengths of each type of early career hire and provides insights into the unique qualities they possess. It underscores the importance of leveraging these strengths and providing tailored support and development opportunities to maximise the potential of early career hires in organisations.



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Future hiring expectations: anticipating changes

Through our survey, we were able to analyse the anticipated changes in hiring levels for different groups over the next 12 months, providing valuable insights into the future hiring trends and preferences of businesses.

Regarding staff in general, approximately 46% of businesses expect an increase in recruitment, while 10% anticipate a decrease and 40% predict no change. This suggests a positive outlook for overall staff recruitment in the coming year.

In terms of graduate hires, around 46% of businesses expect an increase, indicating the continued significance of attracting and hiring university graduates. Only 7% expect a decrease, reflecting the ongoing demand for graduates in various industries. Additionally, 40% predict no change, suggesting a stable level of graduate recruitment.

When it comes to apprenticeships, approximately 40% of businesses expect an increase in hiring apprentices, signalling a growing recognition of the value and benefits associated with apprenticeship programs. Meanwhile, a significant portion,

42%, predicts no change, indicating a level of consistency in apprenticeship recruitment. Just 9% expect a decrease in hiring habits for this group.

Charlotte Blant, Founder and CEO of Tiro said: "In our own discussions with businesses in the field, we observed a positive outlook towards hiring across various groups. It's encouraging to see that a significant percentage of businesses anticipate an increase in recruitment for staff in general, graduate hires, apprentices and school leavers. This reflects a growing recognition of the diverse talent pools available and the value that each group brings to an organisation. It also indicates a proactive approach by businesses to meet their talent needs and invest in the development of early career professionals. The data suggests that businesses are open to exploring different avenues and are willing to adapt their hiring strategies to the changing landscape of the workforce."



Likelihood to switch graduate schemes to degree apprentices

Overall, our survey data indicates a growing inclination among businesses to explore the integration of degree apprenticeships into their talent management strategies, highlighting the increasing recognition of the value and advantages offered by this approach.

Among the respondents, a majority (59%) expressed that their company is likely to switch some of their graduate scheme cohort into degree apprenticeships within the next 12 months. This finding highlights a notable shift in hiring strategies, with businesses recognising the benefits and value offered by degree apprenticeships in nurturing talent.

Conversely, around 29% of respondents neither consider it likely nor unlikely, indicating a level of uncertainty or hesitancy in embracing this transition. It suggests that further evaluation may

be needed for these businesses to fully assess the feasibility of incorporating degree apprenticeships into their talent acquisition plans, or that further support or guidance is needed on how to make an apprenticeship programme successful.

Meanwhile, knowledge is a factor too, as 23% say their company would be interested in switching some of its graduate scheme hiring into degree apprentices but are unsure how. However, it is noteworthy that only a small percentage, 8% of respondents, expressed that it is unlikely for their company to switch to degree apprenticeships.

These figures suggest that while there may be some reservations or challenges associated with the shift, the majority of businesses remain open to considering this alternative pathway for early career hires. One obstacle for hiring managers and leaders may be getting their colleagues on board – 19% say they would like to hire more apprentices but find it hard to convince the rest of the business to do so. Persistent snobbery may also play a role – particularly in the science sector (28% say as much vs 20% among UK businesses in general).

Finally, some relaxation of what the Apprenticeship Levy can be used for could open the door for many companies to commit to bringing more on board. More than a fifth (22%) of companies surveyed suggest that they would hire more apprentices if we could apply the Levy for a wider range of uses, while 20% say there would be more apprentices available if better bursary or relocation packages existed to support them – rising to 24% in the science sector.

Commenting on the potential transition, a roundtable participant shared their perspective, stating, “The possibility of switching some of our graduate scheme cohort into degree apprenticeships is an intriguing prospect. It presents an opportunity to combine academic learning with practical skills, enabling our hires to gain a holistic understanding of their field while contributing to real-world projects. It aligns well with our organisation’s focus on developing well-rounded professionals.”

Charlotte Blant, Founder and CEO of Tiro added, “Businesses are increasingly considering the shift from traditional graduate schemes to degree apprenticeships. This trend reflects a desire to combine academic learning with practical skills development, providing a more holistic approach to early career development. Degree apprenticeships offer businesses the opportunity to nurture talent from within, creating a pipeline of skilled professionals who have both theoretical knowledge and real-world experience. But we need to do more, particularly in the science sector, to remove or reduce the barriers to hiring apprentices. One approach would be doing more to create ‘parity of experience’ with university by allowing the Levy to partly be used to help fund relocation packages.”



Businesses are increasingly considering the shift from traditional graduate schemes to degree apprenticeships.

This trend reflects a desire to combine academic learning with practical skills development, providing a more holistic approach to early career development.





Conclusion

Ultimately, this new research – coupled with detailed insight from Tiro's roundtable discussion – sheds light on changing mindset among businesses when it comes to early career hiring practices. The findings underscore a paradigm shift towards a balanced approach that encompasses both university graduates and apprenticeships.

While some external obstacles to hiring apprentices do persist, it is evident that businesses are recognising the value of apprenticeships as a viable pathway for early career development, helping to nourish talent and boost retention.

The research emphasises the significance of addressing talent management challenges, such as attraction, skills gaps and diversity, which are critical for fostering a thriving workforce. It also highlights the strengths of early career hires, including their diligence, eagerness to learn, enthusiasm and reliability. These qualities make them valuable assets to organisations seeking adaptable and dynamic talent.

A key takeaway from this study is the recognition of apprenticeships as an effective means of building a strong talent pipeline. At Tiro, we actively encourage businesses to explore and embrace this alternative path for early career development, harnessing the unique blend of practical skills and academic learning that apprenticeships offer.

Indeed, by embracing the strengths of early career hires, addressing talent management challenges and leveraging apprenticeships, businesses can position themselves for success in a competitive and ever-changing market.

Methodology

Research based on polling conducted by Censuswide among 556 UK business decision makers or HR professionals, who play a role in hiring decisions. This included a minimum of 50 respondents in science and 50 in the technology sector. All additional commentary sourced via a roundtable discussion conducted on Wednesday 12th July 2023, among seven participants with some responsibility for early career and apprentice recruitment.

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