



State of the Nations
research series

SKILLS MISMATCHES IN THE UK'S CREATIVE INDUSTRIES

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**Creative Industries
Policy and
Evidence Centre**

Led by



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About the Creative Industries Policy and Evidence Centre

The Creative Industries Policy and Evidence Centre (**Creative PEC**) works to support the growth of the UK's creative industries through the production of independent and authoritative evidence and policy advice. Led by Newcastle University, with the Royal Society of Arts and funded by the Arts and Humanities Research Council, Creative PEC comprises a core consortium of Newcastle University, Work Advance, the University of Sussex and the University of Sheffield.

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About the State of the Nations reports

The Creative PEC's 'State of the Nations' series analyses the latest data across four thematic areas to inform the development of policies relating to the creative industries. Their scope is the whole of the United Kingdom, and wherever possible data is presented for all the nations and regions. Regular reports on each area will be published annually over the five years of the Arts and Humanities Research Council (AHRC) funding. The themes and corresponding Research Partners are:

- R&D, Innovation and Clusters (University of Sussex)
- Internationalisation (Newcastle University)
- Arts, Culture and Heritage Sectors (University of Sheffield)
- Education, Skills and Talent (Work Advance).

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Disclaimer

The views expressed in this report are solely those of the authors.

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Foreword

Readers of our *State of the Nations* reports will by now be familiar with the rapid growth performance of the UK's creative industries, which has earned them a place in the UK government's list of priority sectors for the Industrial Strategy, Invest 2035.

But the UK's education and skills system has not kept pace, leading to a widening disconnect between the skills that the workforce has and what employers need. Or put simply, there is a skills mismatch. The creative industries are not alone in this regard, reflecting the UK's wider challenges in education and skills, but disproportionate numbers of their hard-to-fill vacancies are attributable to skills shortages.

Addressing the skills shortages and gaps is one of the highest priorities for policymakers as it is a part of the economy that is beset with market failures. Fundamentally, the returns to investing in education and skills are not fully captured by the individuals or employers who are making the investments, leading to an under-supply in a free market.

Happily, this is a policy area where, at least relative to others like access to finance and innovation, quantitative data is more available, if not always easily accessible, so skills policy can be grounded in, and evaluated against, robust data. In this report, we make use of the Department for Education's Employer Skills Survey, one of the most authoritative sources of labour market information available in the UK, to offer a baseline against which future policies can be judged.

As ever, we welcome your comments.

**Professor Hasan Bakhshi,
Director, Creative PEC**

Executive summary

This second State of the Nations report from the Creative Education, Skills and Talent theme examines employers' perspectives on the picture and patterns of skills mismatches in the creative industries. Presenting new evidence from official sources of labour market information (LMI), the research examines: trends in creative industries employment, considering the size, structure and composition of the creative workforce; the scale, nature and impact of skills mismatches, including skills shortages, gaps and under-utilisation; and employer ambition and investment in skills, including the adoption of management practices that maximise the value of talent to drive business performance. A core intention is to provide valuable insight to inform Skills England's forthcoming skills assessment for the creative industries and to help direct skills investment and skills provision for the creative sector as part of developing the Creative Industries Sector Plan aligned to the government's new Industrial Strategy, Invest 2035.

Over the past decade, the creative industries have been expanding rapidly, with employment in the sector growing at four times the rate of the wider UK workforce. Between 2013 and 2023, the number of people working across the creative sector increased from 1.7 million to 2.4 million, equivalent to 700,000 additional jobs. These jobs are on the whole well-paid and highly skilled. Of those working in the creative industries, 75% hold a degree-level qualification, compared with 51% of the UK workforce, and 86% of creative industries workers are employed in managerial, professional or associate professional jobs, compared with 52% of workers across the economy. Further, the creative industries are more dominated by micro-sized businesses than other parts of the economy, and the share of the creative workforce that are self-employed is double the all-industry average.

This places considerable demand on the skills system to ensure a ready supply of talent armed with the skills creative businesses need to compete, innovate and grow. There is an onus too on creative businesses to invest in and effectively utilise the skills of their workforce to achieve higher levels of productivity and performance. And as artificial intelligence (AI), wider technological advancement and other global 'megatrends' drive continual change in the knowledge, skills and competencies required in the workplace, both employers and workers need to invest sufficiently in upskilling and reskilling to ensure workforce skills remain relevant, now and in the future.

This report has sought to examine whether these conditions are being met. It utilises the Department for Education's Employer Skills Survey (ESS) – one of the most authoritative sources of Labour Market Information in the UK – to present new evidence on the picture and

patterns of skills mismatches in the creative industries. The report presents data collected between June 2022 and March 2023 for the creative industries, compared with the picture for the whole economy (all industries).¹ We draw five key findings.

Key definitions

Hard-to-fill vacancies is a measure of the extent to which employers experience difficulties when recruiting for vacancies.

Skills shortages is a measure of external skills deficiencies, being an indication of whether employers can find the skills, qualifications and experience that they need when trying to recruit to vacancies.

Skills gaps is a measure of internal skills mismatch, being the extent to which employers think that the skills of their current workforce are suitable or deficient for the needs of their current role.

Skills under-utilisation also measures internal skills mismatch, but where individuals have qualifications, capability and/or skills at a higher level than is needed for their current role – as such, there are skills that are under-utilised.

1. The sample size available from ESS enables robust analysis of the data for the creative industries but precludes more detailed analysis (e.g. for sub-sectors, nations or regions) for some variables, particularly those based on questions asked of a subset of the sample. This is an important gap for future research to address, as discussed in Section 6.3.

Summary of findings

1. **The creative industries have been experiencing significant skills challenges, which employers report are hampering innovation.** At surface level, a smaller share of creative industries employers experience skills shortage vacancies compared with all employers (7% vs 10%). However, while these headline measures indicate that recruitment difficulties are less common in the creative industries, they mask the fact that skills shortages pose a significant challenge for creative industries employers. Indeed, 65% of hard-to-fill vacancies in the creative industries are attributable to skills shortages, compared with just 41% of hard-to-fill vacancies across all sectors. Skills shortages are most pronounced for higher-skilled roles, with 78% of creative industries employers experiencing such deficiencies in the three highest occupations, compared with 31% across all industries. And creative industries employers are already much more likely to report having to delay developing new products or services because of the skills shortages they face.
2. **Skills gaps among the existing creative industries workforce are also on the rise, as the sector struggles to get to grips with rapid technological advancement and innovation.** In 2022, nearly 60,000 creative industries workers were not fully proficient for their roles – an increase of 15,000 workers since 2017. Skills gaps caused by the introduction of new technology (including but not limited to AI) and the development of new products and services are a particular challenge for creative businesses.
3. **Accessing advanced digital skills is a critical concern for creative industries employers, who also report a need for stronger job-specific, transversal and management skills.** Creative businesses experiencing skills deficiencies were more than twice as likely as all employers suffering skills deficiencies to suggest applicants or existing workers need to upgrade advanced or specialist IT skills, including for specialist software, hardware and internal systems; graphic design; multimedia production; data use; and web and app development. In addition, specialist skills or knowledge needed to perform the job are also commonly reported as key, and employers also highlight a need to strengthen a range of transversal skills, including complex problem-solving, creative and innovative thinking and a range of management skills.
4. **Creative businesses are ambitious for the future, with technological advancement and innovation expected to create a need for new skills in the year ahead.** Over two-thirds (69%) of employers in the creative industries said that they expect that their employees will need to upgrade their skills (compared with 62% of all employers), with the introduction of new technologies or equipment and the development of new products and services more frequently the driver. The skills anticipated to need development in the future are those in short supply today, reported as shortages and/or gaps.
5. **Despite the substantive impact of skills deficiencies and the ambition of creative businesses, employers are not investing sufficiently in upskilling their workforce.** In 2022, 45% of creative industries employers had not provided any training in the year leading up to the survey – a higher share than that found across all industries (40%). Training is also of shorter duration, more likely to be on the job and less likely to lead to a formally recognised qualification. While creative industries employers are more likely to point to practical barriers to training (a likely reflection of the predominance of small and micro-sized enterprises), they are also more likely to suggest that training is not a priority for their business. Indeed, many creative businesses do not think that they need to offer more training, and this includes around two-thirds of businesses that have not provided any staff training in the past year. The data also points to a need for further examination of the management practices of creative firms and how these might be strengthened to maximise the value of talent and build high-performing, productive and inclusive workplaces.

Research insights and policy considerations

Altogether the research raises concerns about the intensity of skills deficiencies experienced by employers in the creative industries. Even at a time when the creative sector was just recovering from the Covid-19 pandemic and recruitment activity was relatively muted, skills deficiencies were acting as a significant obstacle for creative firms. Skills mismatches are already stymieing innovation in a sector whose defining features include imagination and origination; novel processes, outputs and outcomes; and generating and exploiting intellectual property (Bakhshi, Freeman, & Higgs, 2013).

As we look to the future, the success of the creative industries will depend on employers in the sector stepping up to realise their growth ambitions for higher skills, improving productivity and firm performance by continually investing in and utilising workforce skills. At the same time, they need to be supported by a skills system that better responds to the future skills needs of the sector.

With a new Industrial Strategy and stronger acknowledgement of the importance of sector recognition, end to end in the system, there is a need to strengthen the ways in which the creative industries can work in partnership to: articulate their changing skills needs; co-design high-quality skills provision in response; and ensure skills programmes are effectively resourced and incentivised among employers and learners. The research points to ways this might be achieved.

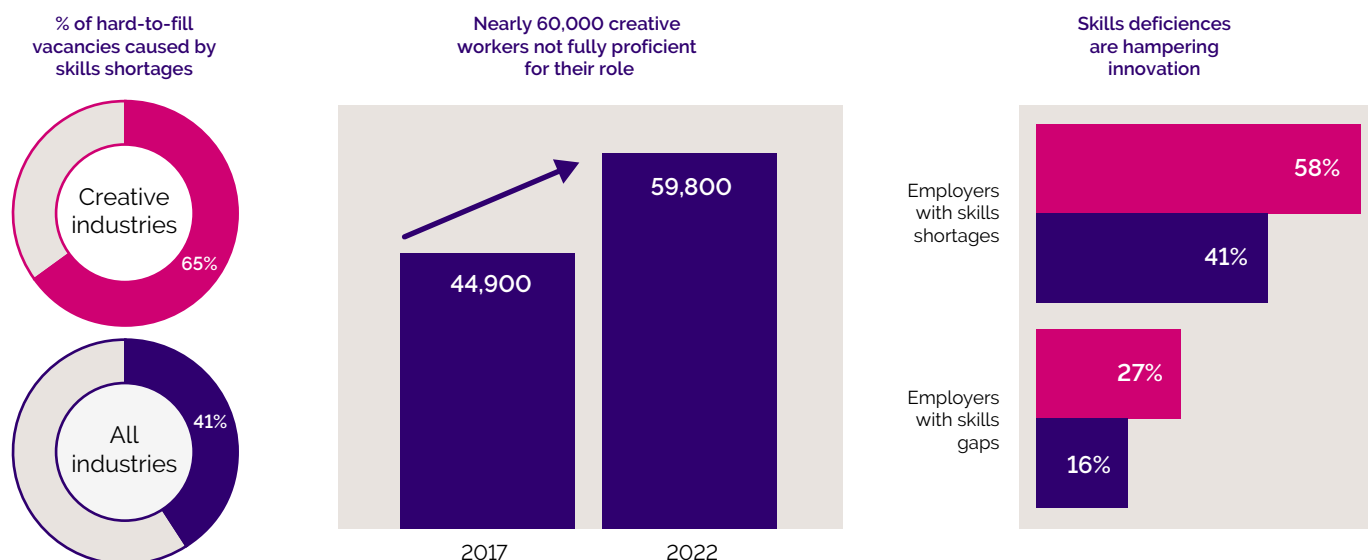
First, robust LMI for the creative industries will be key. As Skills England develops a common LMI approach and coordinates data collection and analysis, this must look beyond Sections and Divisions with the Standard Industrial Classification (commonly known as SIC). In particular, a more detailed and nuanced methodology will be required to capture the needs of newer, emerging growth sectors, like the creative industries, to fill gaps in the current evidence base. This must also connect with labour market assessments produced in some devolved nations, to support a shared understanding of the skills priorities of the creative industries and its sub-sectors.

Second, with skills deficiencies in a range of areas, including specialist technical and vocational skills, transversal skills and, particularly, advanced digital skills, there is a need for stronger mechanisms for collaboration between schools, higher and further education institutions, and industry. Creative education and skills provision also need to be more effectively coordinated across education pathways, from developing creativity, critical thinking and problem-solving in primary and secondary education to strengthening technical routes in further and higher education. And as different nations work to develop skills programmes that are more responsive to industry needs, there is the potential to support greater specialisation and to create and grow recognisable, industry-endorsed training networks of more industry-facing providers that are formally accredited.

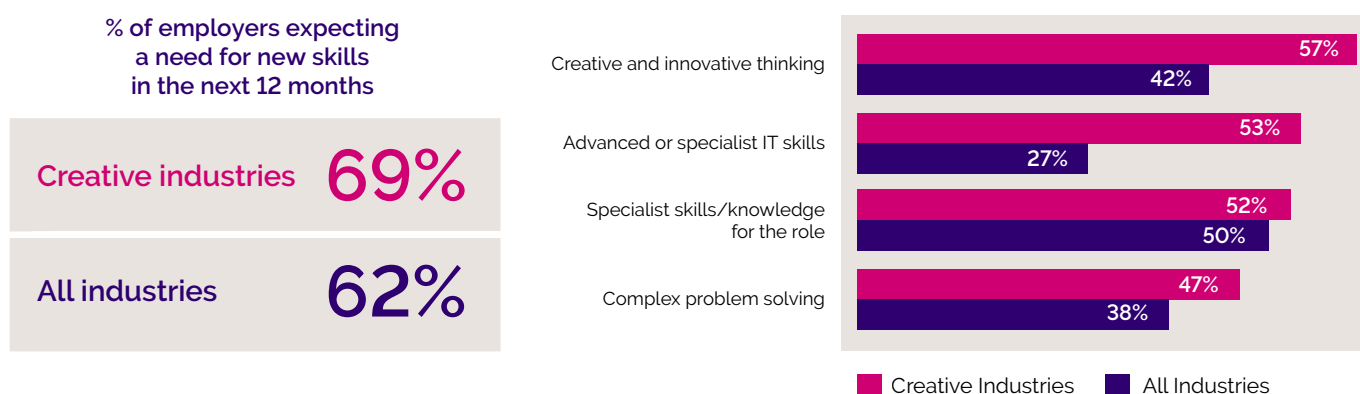
Finally, the research highlights the importance of stimulating greater employer investment in skills and strengthening the management practices of creative firms. A key challenge for the creative industries lies in the structural features of the sector, not least the dominance of micro-sized businesses, which face a range of practical barriers to training. Policy reforms that make skills provision more agile and flexible and consider the scope for more modular training will be vital. But there is also a need to test new policy instruments for better leveraging firm investment – particularly among small- and medium-sized enterprises (SMEs). This includes considering how national measures, such as the Growth and Skills Levy, can work more effectively for the sector. There is also an opportunity to learn from innovative policy approaches in UK nations and regions, and internationally, particularly those that seek to: raise levels of ongoing skills development; strengthen collaboration between creative industries employers to more effectively pool resources and drive industry-relevant investment; and promote the adoption of management practices that maximise the value of talent and build high-performing, productive and inclusive workplaces.

The intensity and impact of skills deficiencies in the creative industries vs all industries, 2022

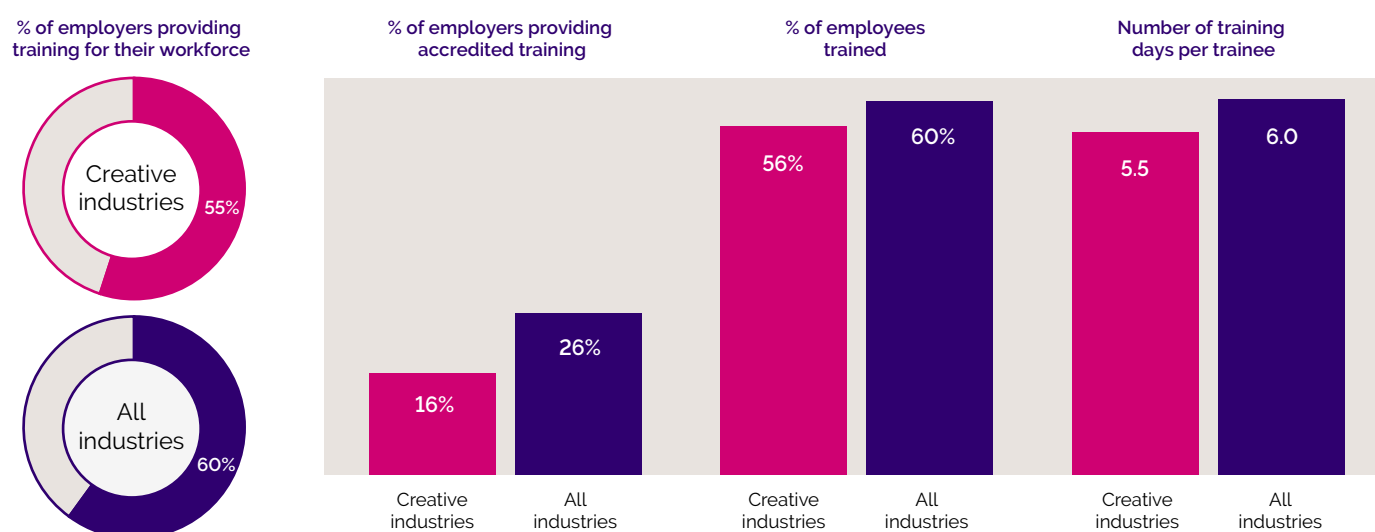
Skills deficiencies are already acting as a significant obstacle for creative businesses



Creative industries employers are ambitious for the future, and anticipate the need for new skills



But the research calls into question the adequacy of employer investment in skills



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Notes: 'Hampering innovation' refers to employers with skills shortages/skills gaps that 'delay developing new products or services'. Bases vary – please refer to the main body of the report for further information.

1 Introduction

1.1 Background context

This report comes at a time of significant change in the policy world. There is a Labour government in Whitehall for the first time since 2010. The pace of change since Sir Keir Starmer's election as Prime Minister in July 2024 has been rapid, as the machine of Government is reorientating around five national 'missions'.²

Paramount among these is the Growth Mission. The UK government has set out a vision for a 10-year modern Industrial Strategy, Invest 2035, that seeks to exploit the UK's unique strengths and ensure it is able to share in the growth opportunities created in the global economy over the next decade.

A key aim is to promote a stronger UK-wide partnership while also extending and deepening devolution to cities and regions. The new Council for Nations and Regions seeks to strengthen vertical coordination and promote collaboration in delivering shared priorities, leveraging investment and unlocking growth across the whole of the UK.

The Industrial Strategy will channel support towards eight priority sectors. These sectors are identified as areas of the economy in which the UK excels today and that present the greatest opportunities for output and productivity growth over the long term (UK Government, 2024). The Industrial Strategy will seek to complement dedicated sector strategies and plans in each nation of the UK (see Department for the Economy, 2021; Northern Ireland Screen, 2023; Scottish Government, 2022; Welsh Government, 2022, 2024).

The creative industries is one of these eight growth-driving sectors. In the spring of 2025, the UK government will publish an Industrial Strategy Creative Industries Sector Plan, developed in partnership with businesses, devolved governments, regions and wider stakeholders. This will set out a long-term vision for the sector and identify policies aiming to unlock investment and overcome barriers to growth.

One critical barrier to growth of the creative industries is skills. The success of the creative industries sector is predicated on highly skilled talent (Giles, Carey, & Spilsbury, 2020). Yet there is growing evidence that, too often, creative industries employers struggle to recruit staff with the right skills or to find suitable training to upskill their workforce. Alongside supply-side challenges, there are demand deficiencies. Existing research points to a need to strengthen employer investment in skills, improve management practices and build work environments within which creative talent can thrive (Carey, Giles, & O'Brien, 2023).

2. The five government missions are: kickstart economic growth; make Britain a clean energy superpower; take back our streets; break down barriers to opportunity; and build an NHS fit for the future (Labour Party, 2024)

Ensuring the skills system is better able to identify and respond to the changing skills needs of the creative industries is therefore a key policy priority. The establishment of Skills England – a new skills oversight body charged with ensuring national and regional skills needs are met – is one critical example of how the UK government is addressing this.³ Its mandate includes: providing an authoritative assessment of current and future skills needs across the UK; driving up employer and learner engagement in the skills system and ensuring a comprehensive, high-quality suite of skills programmes, training and technical qualifications aligned to the identified skills needs; and reviewing the performance of the skills system in overcoming skills challenges.

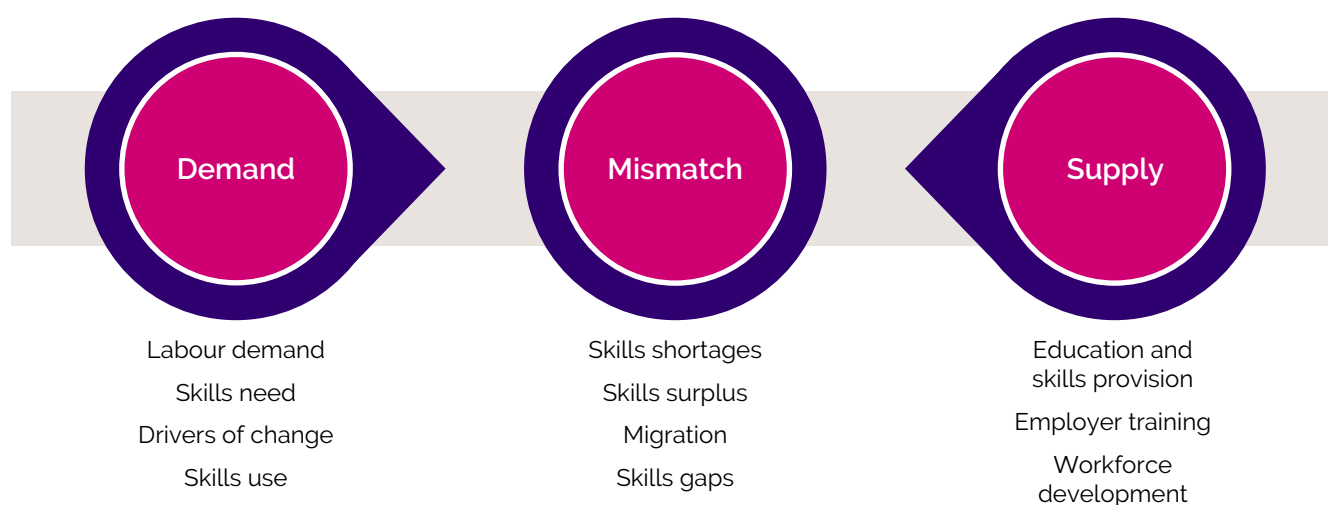
It is expected Skills England will lead key strategic projects; one early example of this is determining which training should be funded through the new Growth and Skills Levy. In its first report, Skills England provided an initial economy-wide assessment of skills needs to begin to develop a shared understanding of national skills priorities. However, further work is underway, including examination of skills requirements in wider priority sectors, such as the creative industries. This is projected to report early in 2025 (Department for Education, 2024).

Robust Labour Market Information (LMI) for the creative industries will be vital to inform this process. Not least, this will help to: identify strategic priorities for skills investment; shape education and training programmes to meet labour market needs; direct businesses and workers towards learning opportunities that can support progression and productivity growth (OECD, 2019); and support the adoption of management and working practices that make full use of a more highly and effectively skilled workforce to enable ongoing business development and growth ambitions.

Such assessments must be grounded in a robust Labour Market Framework. This can provide a structured approach to examining different dimensions of the labour market and how they interact with one another and drive changes in employment and skills requirements.

Figure 1.1 sets out a simplified illustration of key concepts. A more detailed Labour Market Framework, based on the well-established frameworks of the UK Commission for Employment and Skills (UKCES) and the Organisation for Economic Co-operation and Development (OECD), can be found in the Creative PEC's 2020 Creative Skills Monitor (Giles, Carey, & Spilsbury, 2020).

Figure 1.1: High-level Labour Market Framework



3. Further information about Skills England and its likely remit can be found on the [UK government website](#).

Although labour market assessments by sector are routinely produced in some nations (e.g. in Scotland), the current evidence base generally remains patchy across the UK and in different parts of the Framework. In particular, there is a lack of consistent economy-wide sources that support comparative analysis. As such, it is hard to provide a coherent, up-to-date and fully comprehensive picture that regularly identifies

skills challenges in different sectors and jobs in different parts of the UK. This would be a valuable baseline against which to assess the impact of planned reforms to the skills system. While, in its first report, Skills England outlined a commitment to developing a common LMI approach and coordinating LMI data collection and analysis moving forward, at the time of writing this is an area still under development.

1.2 Research aims and approach

The Creative PEC's State of the Nations series on Education, Skills and Talent aims to address this critical evidence gap by progressing an ongoing cycle of reports. Given the scale of this task, a core aim is to strengthen evidence across the Labour Market Framework, advancing knowledge and addressing any gaps incrementally over time. At the same time, it will also be important to rebuild the industry's capacity to undertake such assessments on a regular basis and to use the LMI as key intelligence that provides vital insights about what action needs to be taken and where, and how to optimise opportunities to drive growth through people.

This second State of the Nations report on the Education, Skills and Talent theme examines vital LMI on the demand side: employers' perspectives on the picture and patterns of **skills mismatches in the creative industries**.⁴ This seeks to provide valuable insight, both to inform Skills England's forthcoming skills assessment for the creative industries and to help direct skills investment and skills provision for the creative sector.

Skills mismatch refers to a lack of alignment between the skills needed in different jobs in the labour market and the skills held by workers seeking employment or working in these roles. These can occur for a range of reasons: significant changes in the demand for skills within occupations, often a consequence of technological advancement, changes

to production processes or market shifts; a failure of the skills system to offer high-quality industry-relevant education and training that equips learners with the skills needed in the labour market; inadequate careers guidance to help direct learners or workers to jobs that effectively utilise their skills; or a lack of investment – by Government, employers or workers – in lifelong learning to ensure workforce skills remain current and aligned with the needs of the labour market.

In assessing skills mismatches, the report addresses a range of concepts, summarised in Key definitions on page 13, and described in further detail throughout the report. A more extensive glossary of terms can be found at the end of this report.

4. Creative industries are defined using the Department for Culture, Media and Sport (DCMS) definition (see [here](#)).

Key definitions

Hard-to-fill vacancies is a measure of the extent to which employers experience difficulties when recruiting for vacancies.

Skills shortages is a measure of external skills deficiencies, being an indication of whether employers can find the skills, qualifications and experience that they need when trying to recruit to vacancies.

Skills gaps is a measure of internal skills mismatch, being the extent to which employers think that the skills of their current workforce are suitable or deficient for the needs of their current role.

Skills under-utilisation also measures internal skills mismatch, but where individuals have qualifications, capability and/or skills at a higher level than is needed for their current role – as such, there are skills that are under-utilised.

The research aims to provide up-to-date evidence from the UK's national labour market surveys, to consider the following questions:

- What is the size, structure and employment composition of the creative industries? How has labour demand across creative sub-sectors evolved over the past decade?
- Are the skills priorities of the creative industries being met? What is the scale, nature and severity of any skills mismatches, including skills shortages, skills gaps and under-employment?
- To what degree do creative industries employers view skills as vital to business success? Are they investing sufficiently in workforce development and adopting high-performance workplace practices that unlock the full potential of workers to drive business performance?

To examine skills mismatches in the creative industries, this report presents new evidence from the Employer Skills Survey (ESS) 2022. The ESS is a UK-wide, establishment-based survey of businesses with two or more employees,⁵ commissioned by the Department for Education (DfE). It is one of the most authoritative sources of labour market intelligence in the UK and is recognised as international good practice by organisations such as the OECD. It provides evidence directly from employers on: recruitment difficulties; skills shortages; skills gaps; skills utilisation; anticipated needs for skills development; the scale and nature of training; and wider management practices. The 2022 survey is the sixth since 2011 to cover England, Wales and Northern Ireland (the 2019 survey excludes Scotland).

5. The ESS is a business survey of establishments with two or more employees. Many questions concern employees only and hence exclude creative freelancers.

While DfE has published data from the ESS 2022 (see [here](#)), this is for broad sectors of the economy only. DCMS have also published ESS 2022 data for DCMS sectors (see [here](#)). To provide a more detailed examination of the data for the creative industries, the research team commissioned IFF Research to produce a full set of customised tables from the ESS, which underpins analysis throughout this report. The sample size available from the ESS 2022 for the creative industries is 3,231 establishments. This enables robust analysis of the data for the creative industries but can preclude more detailed analysis (e.g. for sub-sectors, nations or regions) for some variables, particularly those based on questions asked of a subset of the sample. The data presented is

weighted to be representative of the business population. The sample size (unweighted base) is noted under each table and chart. Data based on an unweighted sample of fewer than 30 establishments has been suppressed. The report presents data for the creative industries compared with the picture for the whole economy – that is, all industries, including the creative industries. Data has also been subject to significance testing,⁶ comparing data for the creative industries with data for other sectors of the UK economy; this provides a robust basis for the research to highlight where the picture for the creative industries is distinct from other parts of the economy. Further information on the ESS and other data sources used during the research can be found in the data reference list.

1.3 Report structure

The report sets out the results from the research:

Section 2 contextualises the research by examining the overall shape and structure of the creative industries, the distinct features of creative work and employment trends in the creative industries over the past decade.

Section 3 explores the prevalence and patterns of skills shortages in the creative sector, the occupations and skills hardest to find in the labour market and the impact and response to skills shortages in the creative industries.

Section 4 examines skills deficiencies evident among the creative workforce, the skills that need improving, the main causes of skills deficiencies, their impact on the business and the steps employers have taken to overcome these challenges.

Section 5 explores employer ambition and investment in skills in the creative industries, including anticipated future skills needs, the extent, adequacy and nature of employer investment in skills and whether creative firms are adopting people-orientated management practices.

Section 6 draws conclusions, discusses policy considerations and identifies areas for future research, including for the Creative PEC's Education, Skills and Talent theme.

6. A z-test at a 95% confidence level has been performed to compare the 'Creative industries' subgroup against all other subgroups combined. If the test rejects the null hypothesis that there is no significant difference, this implies that we can be 95% confident that a difference exists between the two comparison groups.

2

Creative work and employment trends

2.1 Economic significance and structure of the creative industries

The creative industries are a significant and rapidly expanding part of the UK economy. They encompass: Advertising and marketing; Architecture; Crafts; Design and designer fashion; Film, TV, video, radio and photography; IT, software and computer services; Publishing; Museums, galleries and libraries; Music, performing and visual arts. The sector contributed nearly £125 billion to the UK economy in 2022 – equivalent to 6% gross value added (GVA) (DCMS, 2024a).

The importance of the sector, however, extends beyond its direct economic contribution. The creative industries contribute over £20 billion to the UK's trade balance, with creative industries services comprising a growing share of UK service exports over the past decade (DCMS, 2021; Maioli, Fazio, Jones, & Simandjuntak, 2024). Creative industries are also a vital source of soft power and a crucial medium for storytelling (DCMS & CIC, 2023). In the context of this research, the sector provides many highly skilled, well-paid jobs in cities and regions across the UK (Siepel, Ramirez-Guerra, & Rathi, 2023).

In 2022, over 2.4 million people worked in the creative industries in the UK – equivalent to over 7% of the workforce. This includes those working as employees and self-employed individuals, and those in creative and non-creative roles in the sector.

As shown in Figure 2.1, IT, software and computer services is the largest sub-sector, contributing £53.4 billion in GVA and employing over one million workers in 2023 – equivalent to over 4 in 10 jobs in the creative industries. Four sub-sectors each account for around 10% of the creative industries workforce: Music, performing and visual arts; Advertising and marketing; Film, TV, video, radio and photography; and Publishing. This is followed by: Design and designer fashion (around 143,000 workers, making up 6% of creative industries employment); Architecture (around 107,000, 4%); and Museums, galleries and libraries (around 91,000, 4%). Finally, the Crafts sector is estimated to employ around 7,000 workers, albeit there are significant definitional and data issues that mean official statistics underestimate the scale and contribution of craft industries (see TBR, 2014 for further discussion).

Figure 2.1: The size and shape of the creative industries, 2022/23 (total employment)



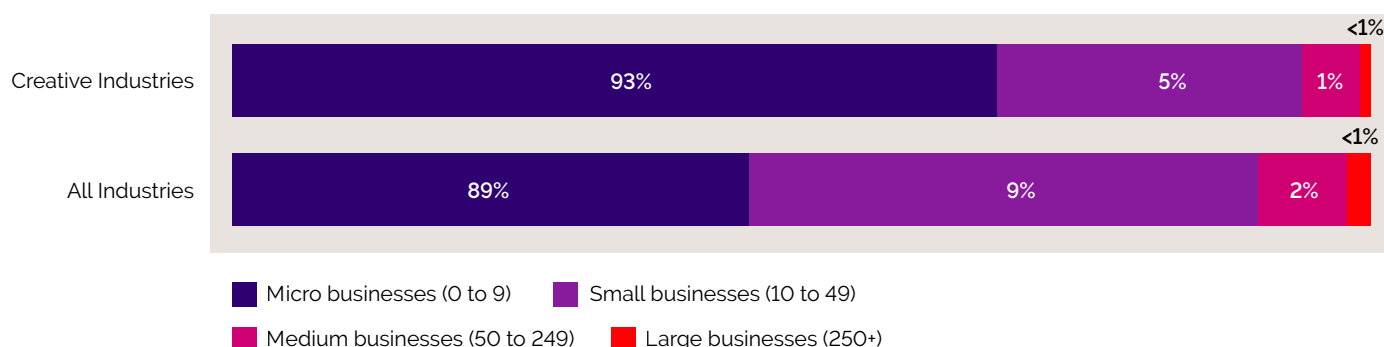
Source: Authors' elaboration based on data from (DCMS, 2024a) and (DCMS, 2024b)

Notes: GVA data is 2022 (provisional), at current prices. Employment data is 2023, total filled jobs, including second jobs and both employees and self-employed workers in all occupations.

The creative industries are dominated by micro-sized businesses to a greater extent than other parts of the UK economy. In 2023, there were 265,420 enterprises in the creative industries, and 93% of these firms employed less than 10 workers, compared with 89% across all industries (i.e. all industries including the creative industries) (see Figure 2.2). Small, medium and large firms are, correspondingly,

under-represented (DCMS, 2023). Further evidence from the Employer Skills Survey (ESS) suggests that the very smallest firms, with between two and four employees, are particularly dominant, accounting for 65% of establishments in the creative industries, compared with 54% across the economy (DfE, 2023).

Figure 2.2: Size of firms in the UK creative industries vs all industries, 2023 (% enterprises)



Source: Authors' elaboration based on data from (DCMS, 2023)

Notes: Data is based on the Inter-Departmental Business Register, which includes businesses that are registered for Value Added Tax with HM Revenue and Customs (HMRC), registered for a Pay As You Earn scheme with HMRC, or an incorporated business registered at Companies House. Data therefore excludes: very small businesses; the self-employed and those without employees; and some non-profit-making organisations.

2.2 Work in the creative industries

There are some distinct features of work in the creative sector. For instance, work in the creative industries is mostly highly skilled and well-paid (see Figure 2.3). In 2023, three quarters (75%) of those working in the creative industries held a higher education qualification (including undergraduate and postgraduate degrees and other higher education qualifications) compared with just over half (51%) of the UK workforce.

The vast majority (86%) of the creative workforce worked in managerial, professional or associate professional jobs, while the share was around half (52%) for workers across the economy (Labour Force Survey 2023). Official statistics show that average (median) earnings were also over 40% higher in the creative industries, with workers earning on average £21.63 per hour, compared with the all-industry average of £15.18 in 2023 (DCMS, 2024c). These earnings do vary greatly by sub-sector, however, with low pay a persistent issue for some creative industries workers (Carey, Giles, & O'Brien, 2023).

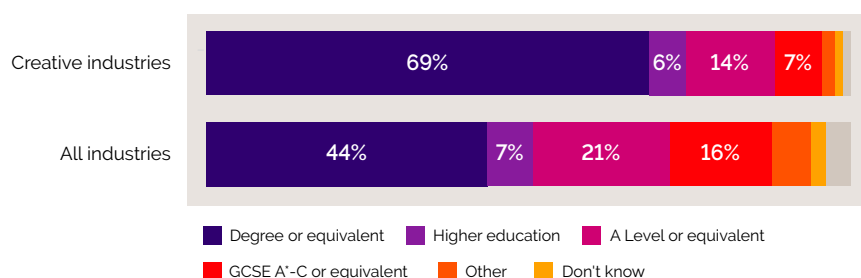
The share of the creative workforce that are self-employed was double the all-industry average (28% and 14%, respectively), with this generally reflecting choice rather than need (see Carey, Giles, & O'Brien, 2023). While

creative industries workers are more likely to be working on a full-time rather than part-time basis, this varies considerably between creative sub-sectors, and project-based working is much more common in the sector (Carey, Giles, & O'Brien, 2023).

Although there are growing creative clusters across the UK (Siepel, Ramirez-Guerra, & Rath, 2023), creative work remains heavily concentrated around London and the South East of England. Nearly half (47%) of jobs in the creative industries were based in these two regions, compared with 30% of all jobs in the economy. In contrast, a relatively small share of creative industries employment is in the East Midlands and North East (4% and 3%, respectively), Wales (3%) and Northern Ireland (2%).

Figure 2.3: Structure of work in the creative industries vs all industries, 2023

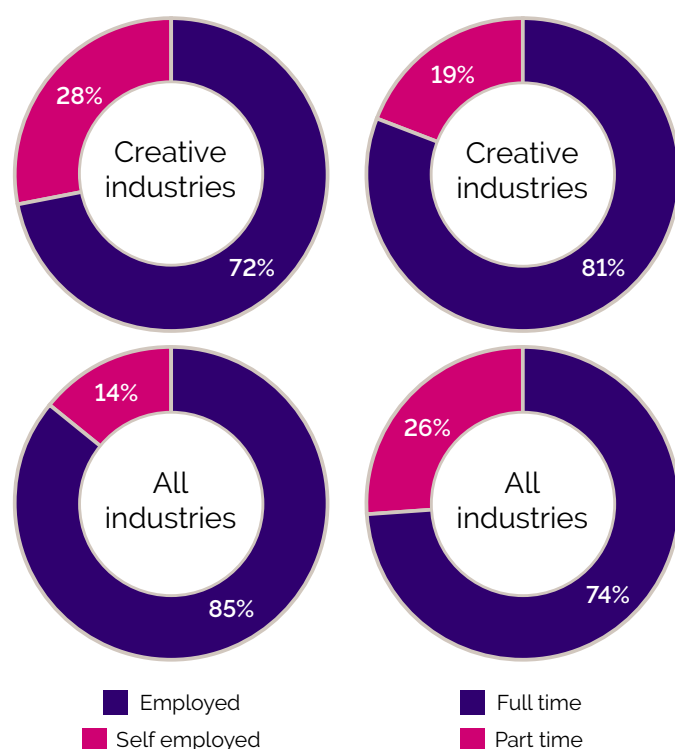
Workforce qualifications



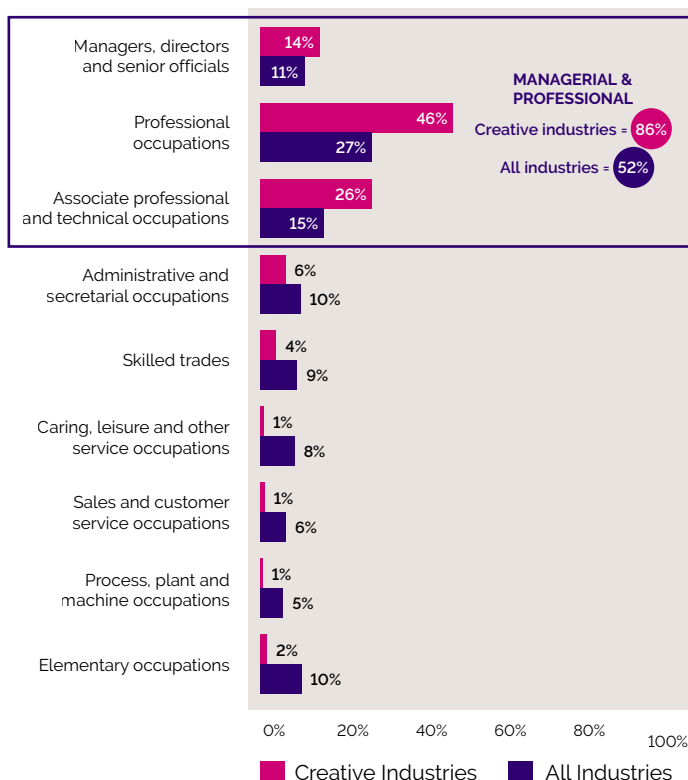
Average hourly earnings



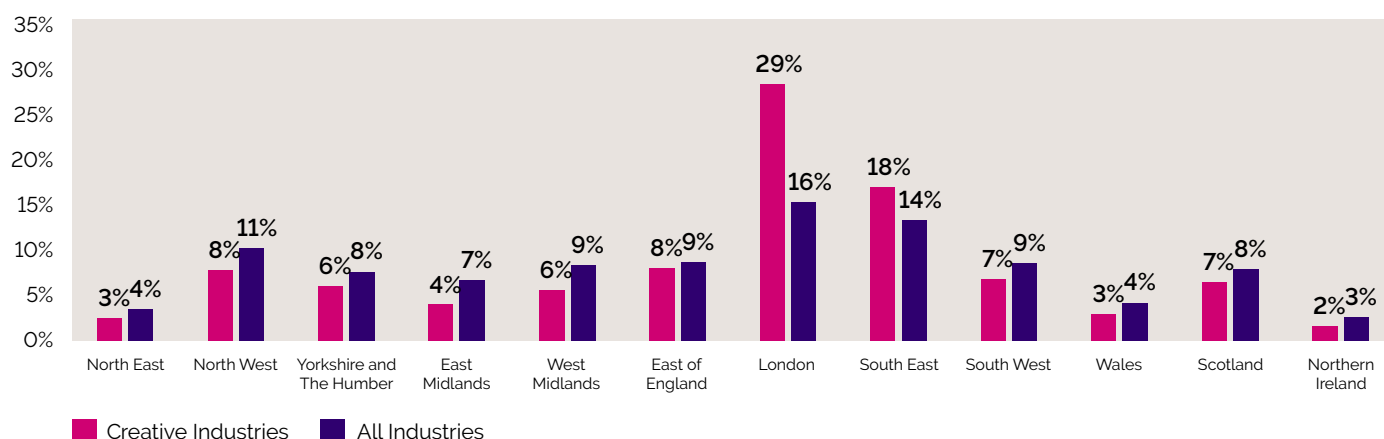
Employment status & work patterns



Occupations



Region of employment



Source: Authors' elaboration based on data from (DCMS, 2024b) and the Labour Force Survey 2023

Notes: Data is based on the Annual Population Survey. Median hourly earnings, based on self-reported data from the Labour Force Survey for employees only. Workforce includes those working in the creative industries, including as their main and second job. Data includes both employees and self-employed workers in all occupations in the creative industries. The Labour Force Survey question concerning qualifications changed in 2022, meaning data is not comparable with earlier years.

While a highly skilled workforce is a common feature of all creative sub-sectors, in other ways sub-sectoral characteristics can vary considerably (Figure 2.4).

For instance, average rates of pay are high in IT, software and computer services (£24.95 per hour), Architecture (£20.24), Film, TV, video, radio and photography (£20.20), Advertising and marketing (£19.21) and Publishing (£18.69). Yet, in sectors like Music, performing and visual arts (£16.41), Design and designer fashion (£15.69), and Museums, galleries and libraries (£15.18), pay is much more in line with median earnings across the economy (DCMS, 2024c). Existing research also reports significant pay disparities within sub-sectors (Carey, Giles, & O'Brien, 2023).

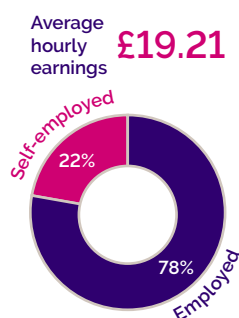
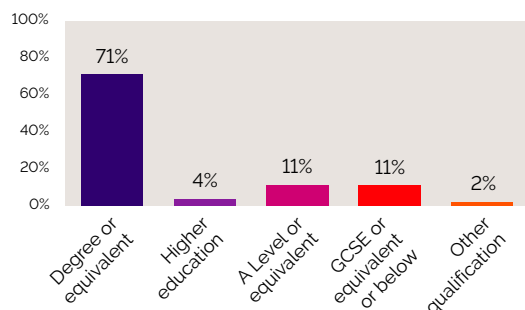
There are considerable differences in the propensity for workers to be self-employed. Indeed, in some creative sub-sectors, such as Music, performing and visual arts and Design and designer fashion, this is the dominant form of work. Similarly, nearly half of the Film, TV, video, radio and photography sector work in a self-employed capacity. In contrast, the employment status of workers in IT, software and computer services and Museums, galleries and libraries is much more akin to the wider economy, with around 9 in 10 workers being employees (DCMS, 2024b).

In some creative sub-sectors, the occupational profile of the workforce can look quite different to the creative industries-wide picture. In Crafts, for example, 69% of the workforce were employed in skilled trade occupations, which also account for a higher share of employment in Design and designer fashion (24%). Caring, leisure and other service occupations accounted for 12% of employment in Museums, galleries and libraries – a considerably higher share than across the creative industries (1%) and the wider economy (8%).

As illustrated in Figure 2.4, the dominant job roles can also vary quite considerably between creative sub-sectors. While nearly all parts of the creative industries offer highly skilled, professional roles, employment can be concentrated in occupations quite specific to the industrial context. For example, in Architecture, 22% of the workforce were employed as architects and 21% as architectural technologists or planning officers; in Publishing, 24% worked as authors, writers and translators; in IT, software and computer services, 28% were programmers and software developers; and in Film, TV, video, radio and photography, 22% worked as photographers and audiovisual and broadcasting equipment operators. There are, however, areas of commonality – for example, designers in various forms account for a considerable share of employment in Design and designer fashion, but also work across many creative sub-sectors (and indeed other sectors of the economy).

Figure 2.4: Work in different creative sub-sectors, 2023

Advertising & marketing



Marketing, sales & advertising directors = **9%**

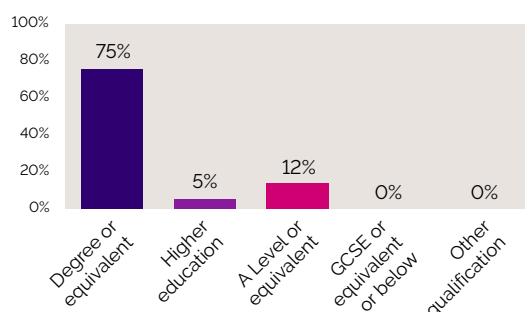
Marketing associate professionals = **8%**

Graphic & multimedia designers = **8%**

Public relations professionals = **7%**

Marketing & commercial managers = **6%**

Architecture



Architects = **22%**

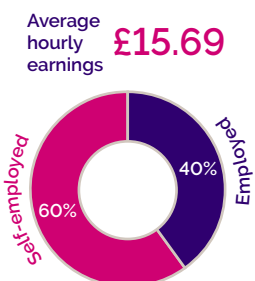
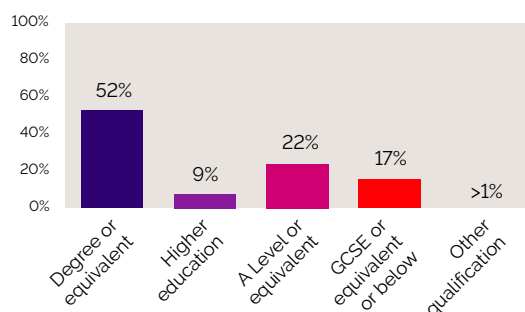
Architectural technologists, planning officers = **21%**

CAD, drawing & architectural technicians = **6%**

Local government admin occupations = **5%**

Production managers & directors in construction = **4%**

Design and designer fashion



Graphic & multimedia designers = **36%**

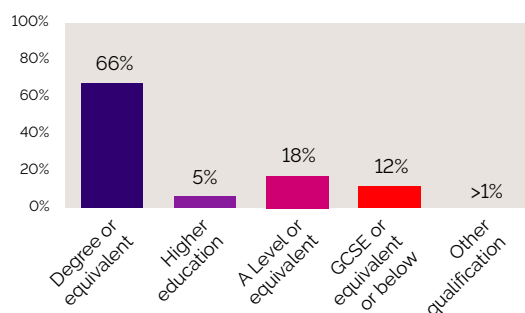
Painters & decorators = **15%**

Interior designers = **9%**

Clothing, fashion & accessories designers = **5%**

Other skilled trades = **5%**

Film, TV, video, radio & photography



Photographers, AV & broadcasting equipment operators = **22%**

Art officers, producers & directors = **21%**

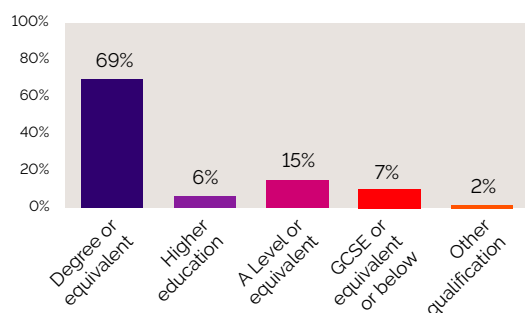
Managers & directors in the creative industries = **4%**

Authors, writers & translators = **3%**

Business & related research professionals = **3%**

Figure 2.4: Work in different creative sub-sectors, 2023 (continued)

IT, software & computer services



Average hourly earnings **£24.95**



Programmers & software development professionals = **28%**

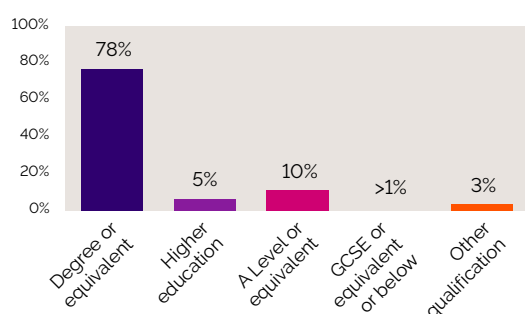
Other information technology professionals = **8%**

IT managers = **7%**

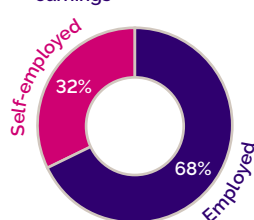
IT directors = **6%**

IT business analysts, architects & system designers = **3%**

Publishing



Average hourly earnings **£18.69**



Authors, writers & translators = **24%**

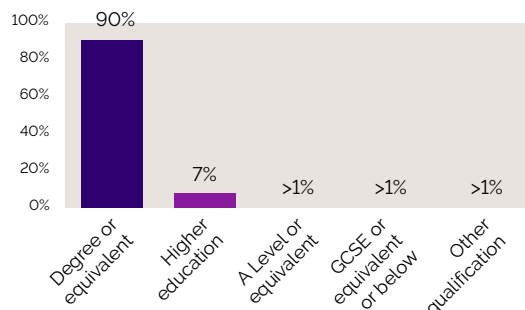
Managers & directors in the creative industries = **8%**

Newspaper/periodical journalists & reporters = **6%**

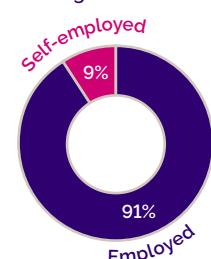
Newspaper & periodical editors = **4%**

Other functional managers & directors = **4%**

Museums, galleries & libraries



Average hourly earnings **£15.18**



Sport & leisure assistants = **10%**

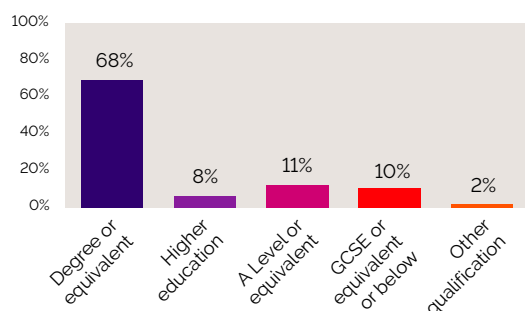
Art officers, producers & directors = **8%**

Managers & proprietors in other services = **6%**

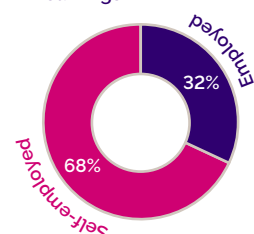
Archivists & curators = **6%**

Programmers & software development professionals = **4%**

Music, performing & visual arts



Average hourly earnings **£16.41**



Artists = **15%**

Musicians = **10%**

Actors, entertainers & presenters = **8%**

Authors, writers & translators = **8%**

Other teaching professionals = **7%**

Source: Authors' elaboration based on data from (DCMS, 2024b, 2024c) and the Labour Force Survey 2023

Notes: Data is based on the Annual Population Survey and the Labour Force Survey. Crafts has been excluded because the sample size is too low for robust analysis. Workforce includes those working in the creative industries, including as their main and second job. Data includes both employees and self-employed workers in all occupations in the creative industries. The Labour Force Survey question concerning qualifications changed in 2022, meaning data is not comparable with earlier years. Median hourly earnings, based on self-reported data from the Labour Force Survey for employees only. Occupations are four-digit Standard Occupational Classification 2020 codes, and figures in parentheses represent the share of the sub-sector workforce working in these occupations.

2.3 Employment trends in the creative industries

Employment in the creative industries has expanded rapidly over the past decade, growing at four times the rate of the wider UK economy. Between 2013 and 2023, employment in creative sectors increased from 1.7 million to 2.4 million, equivalent to 700,000 additional jobs or an uplift of 41%, compared with 11% across all industries (DCMS, 2024b).

Growth has been particularly rapid in IT, software and computer services, which has created over 485,000 additional jobs over the past decade, equivalent to an expansion of 85% in aggregate or 6.3% on average per annum (Table 1). The Advertising and marketing sector has also witnessed substantial growth, with the number of jobs in the sector expanding by nearly 100,000 (+63% or 5.0% p/a). Growth of other creative sub-sectors has also exceeded the wider UK economy, in: Music, performing and visual arts (18%, 1.7% p/a); Design and designer fashion (16%, 1.5%); and Architecture (14%, 1.3%).

In contrast, in other creative sub-sectors employment growth has been more modest. Jobs in Publishing (+10%, 0.9% p/a) and Film, TV, video, radio and photography (+8%, 0.8% p/a), for example, have expanded at a rate more in line with wider UK economy trends. Publicly funded sectors such as Museums, galleries and libraries have seen below-average jobs growth (6%, 0.6%), likely linked to cuts in funding for the arts over the past decade (Ashton, Brownlee, Gamble, & Stravrou, 2024). While in Craft the number of jobs has fallen, caution needs to be exercised due to the definitional and data issues referenced above.

Table 2.1: Employment change in creative sub-sectors vs all industries, 2013 to 2023

	Employment (000s)			Employment change 2013–2023		
	2013	2018	2023	# (000s)	%	Average annual %
All industries	30,760	33,170	34,006	3,246.0	11%	1.0%
Creative industries	1,713	2,040	2,419	705.8	41%	3.5%
Advertising and marketing	155	195	253	98.2	63%	5.0%
Architecture	94	111	107	13.2	14%	1.3%
Crafts	8	9	7	-0.5	-7%	-0.7%
Design and designer fashion	124	163	143	19.3	16%	1.5%
Film, TV, video, radio and photography	232	245	252	19.7	8%	0.8%
IT, software and computer services	574	733	1,061	487.4	85%	6.3%
Museums, galleries and libraries	85	89	91	5.4	6%	0.6%
Music, performing and visual arts	244	296	288	44.3	18%	1.7%
Publishing	198	199	217	18.9	10%	0.9%

Source: Authors' elaboration based on data from (DCMS, 2024b)

Notes: Data is based on the Annual Population Survey. Workforce includes those working in the creative industries, including as their main and second job. Data includes both employees and self-employed workers in all occupations in the creative industries.

3

Skills shortages

A critical measure of the extent of mismatch between the skills being developed through the education system and the skills needed by the creative industries is skills shortages. These measure skills deficiencies in the labour market, becoming apparent when employers try to recruit for vacancies in their business but are unable to find candidates with the skills, qualifications or experience they need.

In this section, we explore the prevalence and patterns of skills shortages in the creative industries, drawing on evidence from the Employer Skills Survey (ESS) 2022. The methodology for identifying skills shortages is illustrated in Figure 3.1. It is a sequential process, where employers are asked: (1) whether they have recruited in the past year; (2) whether they found any of those vacancies difficult to fill; and (3) what caused these recruitment difficulties.⁷ A range of causes are examined, including: lack of interest in doing the type of job being advertised; the pay and conditions on offer; lack of applicants with the necessary skills, qualifications, work experience or attitude for the job; and competition for talent from other employers. Skills shortages vacancies are those that are hard to fill because of a lack of applicants with the skills, the qualifications or the work experience that the company demands.

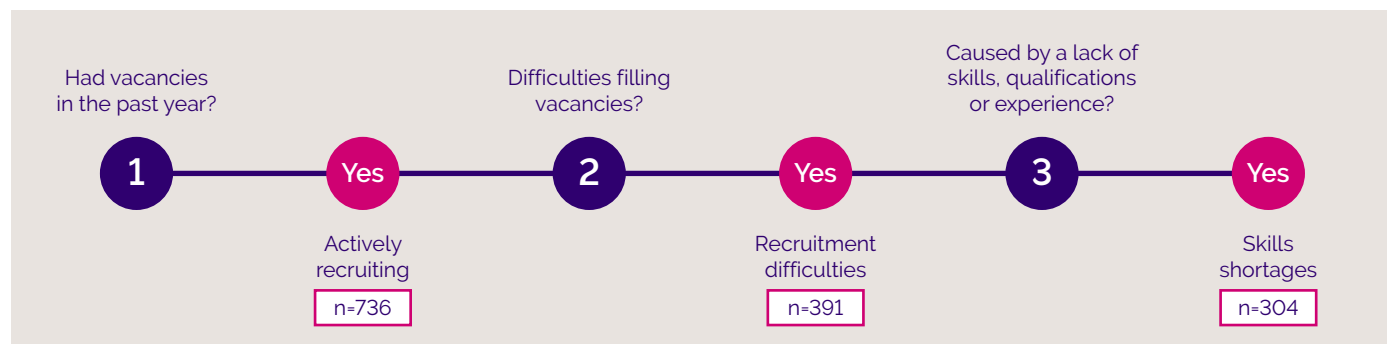
Often figures are reported as a share of employers – for example, the share reporting hard-to-fill vacancies. However, there is also a need to examine density – for example, the proportion of vacancies that are skills shortages.

The way in which figures are reported can make a significant difference to the overall narrative, so it is important to look beyond headline measures when examining recruitment difficulties and skills shortages and determining the appropriate response.

It is also important to note the labour market context at the time the survey was conducted. The ESS 2022 was in field from June 2022 to March 2023, so many of the questions about employer activities and experiences over 'the past 12 months' relate to the period June 2021 to March 2022. This was a time when the economy was only just beginning to recover from the decimating impact of the Covid-19 pandemic. Some sectors of the economy were quicker to bounce back than others, and this significantly impacted the extent of recruitment activity and the prevalence of labour and skills shortages. That said, while the external context influenced the metrics, there has also been a degree of stability and persistence in the picture of skills shortages, particularly where skills challenges are deep-rooted and hard to overcome.

7. The question concerns the recruitment of employees and excludes the appointment of creative freelancers.

Figure 3.1: Identifying skills shortage vacancies using the Employer Skills Survey (n for creative industries)



Source: Authors' elaboration based on Employer Skills Survey 2022 (DfE, 2023)

3.1 Recruitment difficulties and skills shortages

In 2022, 41% of creative industries employers had recruited in the past 12 months and 18% had at least one vacancy at the time of interview. Employers in the creative industries were slightly less likely to be actively recruiting than those in across all industries, with 49% of all employers recruiting in the year preceding the survey and 23% having one or more live vacancies.

Creative industries employers were also less likely to be recruiting than all employers in 2017 and 2019. This could reflect a range of factors, including the labour market context at the time of the survey, the size of creative firms and the use of freelance workers, which may mean creative industries employers are less likely to recruit permanent staff, particularly when responding to fluctuations in demand.

Creative industries employers were also statistically less likely to experience recruitment difficulties. In 2022, 52% of employers in the creative industries that were recruiting suggested some of their vacancies were hard to fill, compared with 63% of all recruiting employers. Of all creative industries employers with hard-to-fill vacancies, less than 1 in 10 (9%)

experienced recruitment difficulties – lower than the all-industry percentage (15%).

However, when it comes to skills shortages, the picture is more nuanced. Headline measures show that a statistically significant smaller share of creative industries employers experienced skills shortage vacancies (7% compared with 10% of all employers). This represents a slight increase since 2017, when 6% of employers – in the creative industries and across all sectors – reported skills shortage vacancies. Further, these headline measures tend to reflect the fact that recruitment difficulties are less common in the creative industries and mask the significant challenge that skills shortages pose to creative industries employers that do experience them.

Table 3.1: Employment change in creative sub-sectors vs all industries, 2013 to 2023

	Creative industries	All industries
Actively recruiting		
% employers that have recruited in the past 12 months	41%	49%
% employers with at least one live vacancy	18%	23%
Recruitment difficulties		
% recruiting employers that have hard-to-fill vacancies	52%	63%
% all employers that have hard-to-fill vacancies	9%	15%
% vacancies that are hard to fill	44%	57%
Skills shortages		
% recruiting employers that have skills shortage vacancies	41%	42%
% all employers that have skills shortage vacancies	7%	10%
% vacancies that are skills shortage vacancies	33%	36%
% hard-to-fill vacancies that are skills shortage vacancies	65%	41%

Source: Authors' elaboration based on Employer Skills Survey 2022 (DfE, 2023)

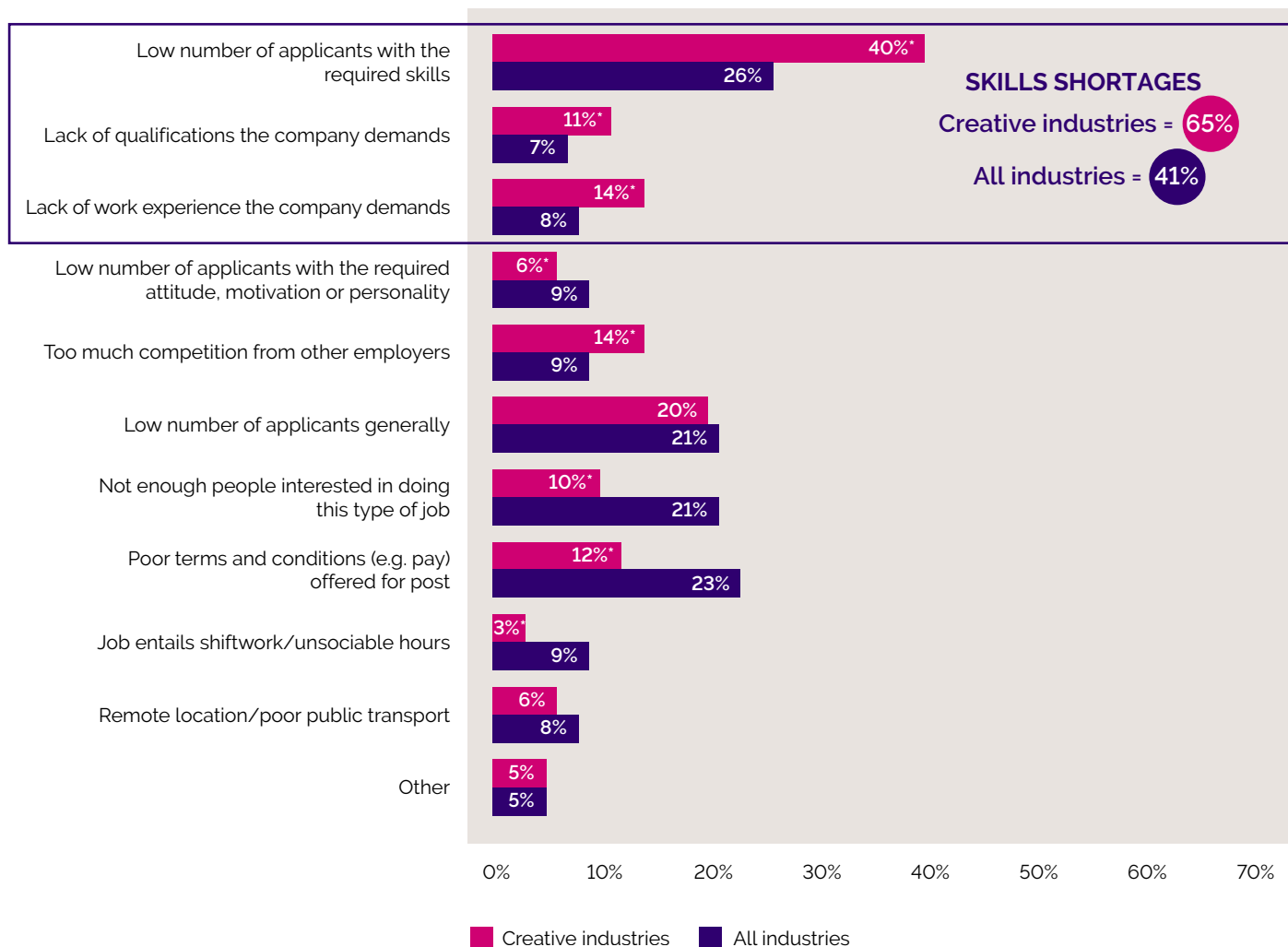
When we look in more detail at the main causes of recruitment difficulties, we see a picture of contrast. On the one hand, creative industries employers tend to experience fewer hard-to-fill vacancies because of the appeal of the job or quality of work in the sector. Indeed, as evidenced by wider research, creative jobs tend to be highly sought after, offering good pay, greater flexibility and autonomy, and a vehicle for creative expression (Carey, Giles, & O'Brien, 2023; Carey, Giles, & Collins, 2024).

Yet finding the necessary skills is a much bigger problem for creative businesses: 40% of hard-to-fill vacancies in the creative industries were mainly a consequence of a low number of applicants with the required skills, compared with 26% of all hard-to-fill vacancies (see

Figure 3.2). Recruitment difficulties were also more likely to be a consequence of a lack of applicants with the necessary qualifications (11% compared with 7%) or work experience (14% compared with 8%). Together, this means that 65% of hard-to-fill vacancies in the creative industries were attributable to skills shortages, compared with just 41% of all hard-to-fill vacancies: a substantial 24 percentage point difference.

Unsurprisingly, given rapid expansion of the sector and substantial skills shortages faced by creative industries employers, competition for talent is also fierce – this was the main cause of 14% of hard-to-fill vacancies in the creative industries compared with 9% across all sectors.

Figure 3.2: Main causes of hard-to-fill vacancies in the creative industries vs all industries, 2022 (% hard-to-fill vacancies)



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments with hard-to-fill vacancies, unprompted (n = 818). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

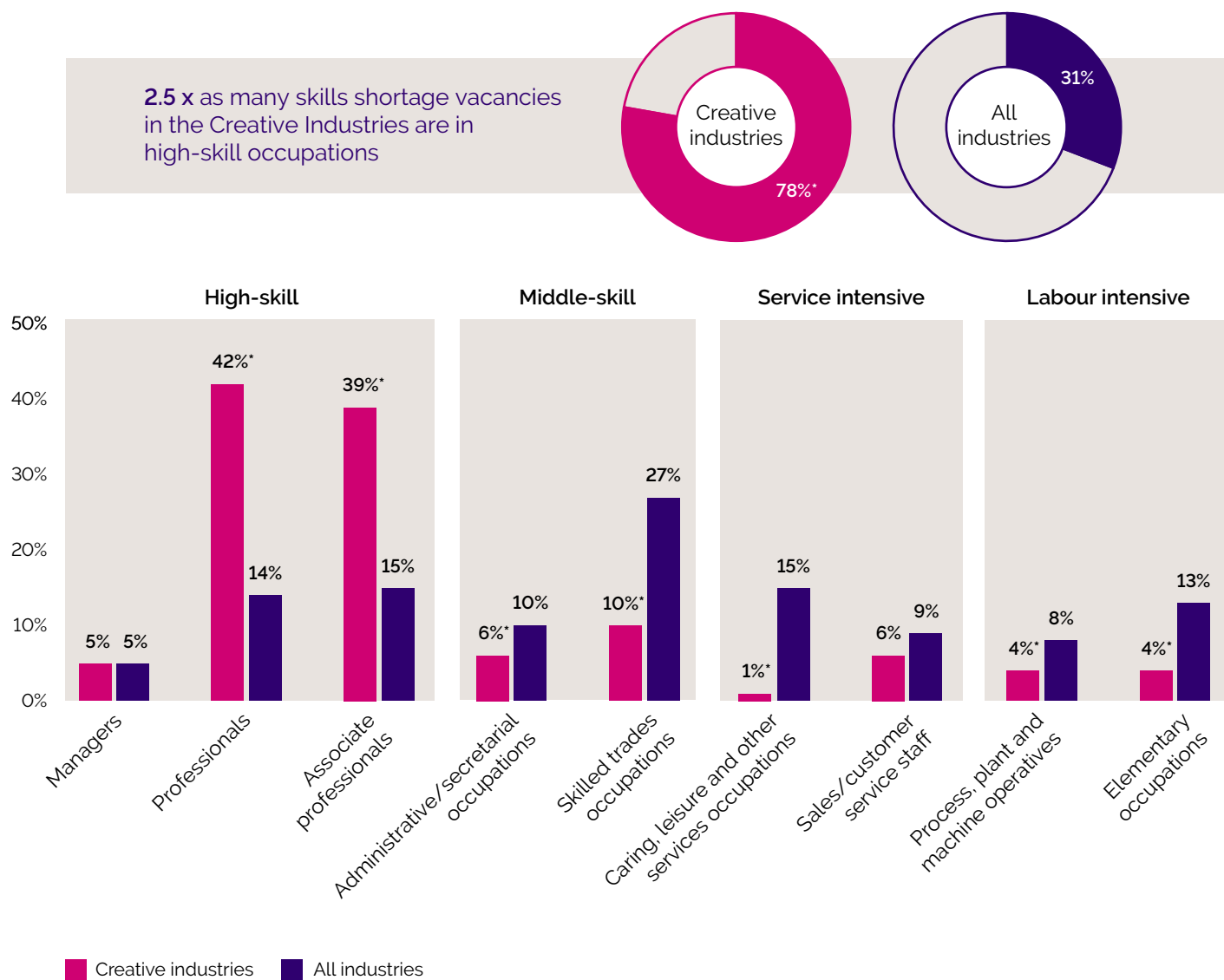
3.2 Occupations and skills hardest to find

The distribution of occupation types affected by skills shortage vacancies differs significantly between the creative industries and the overall economy. Creative industries employers are far more likely to struggle to find applicants with the skills, qualifications or experience required when looking for higher-level occupations. Indeed, 78% of creative industries employers who are experiencing skills shortages say that they are affecting jobs in the three highest occupations, compared with 31% of all industries.

The disparities are particularly great for professional occupations (with 42% of creative industry employers suggesting these roles are affected, compared with 14% of employers across the economy) and associate professional occupations (39% and 15%, respectively). There are similar results looking at the density of vacancies. For example, the highest density

of skills shortages as a share of all vacancies was within higher-skilled roles (36%). While these findings will in part reflect the relative concentration of the creative industries workforce within these three occupational groups (see Figure 3.3), they also echo wider research which suggests skills shortages are more pronounced for higher-skilled roles.

Figure 3.3: Incidence of skills shortage vacancies by occupation in the creative industries vs all industries, 2022 (% employers)



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Notes: This is a multicode question so figures do not sum to 100%. Employer base: all establishments with hard-to-fill vacancies (n = 818). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

Those employers who reported that they had a skills shortage vacancy were asked what technical and practical skills and soft skills they found difficult to obtain from applicants. As shown in Figure 3.4, the main skills lacking in the creative industries, and across the economy, were specialist skills or knowledge to perform the role (76% of those with a skills shortage vacancy – significantly higher than the 65% across all industries and representing an increase since 2017). This places the onus on the distinct technical skills for the creative industries, including areas such as design skills, which are central to occupations in many creative sub-sectors – from fashion to advertising, architecture to publishing – and are clearly not being adequately developed in the skills system.

Around half of creative industries employers experiencing skills shortages reported difficulty finding candidates with complex problem-solving skills (51%) and creative and innovative thinking (50%) – significantly higher than in other parts of the economy (in both cases, 43%). This reflects the necessity of these skills across the creative industries.

However, as with the 2017 ESS (Giles, Carey, & Spilsbury, 2020), the biggest point of difference between the creative industries and other sectors in the picture of skills deficiencies was the acute challenge of accessing advanced or specialist IT skills. Nearly half (48%) of all creative industries employers with a skills shortage vacancy pointed to the challenge of finding candidates with these skills, compared with only 21% of employers across all industries.

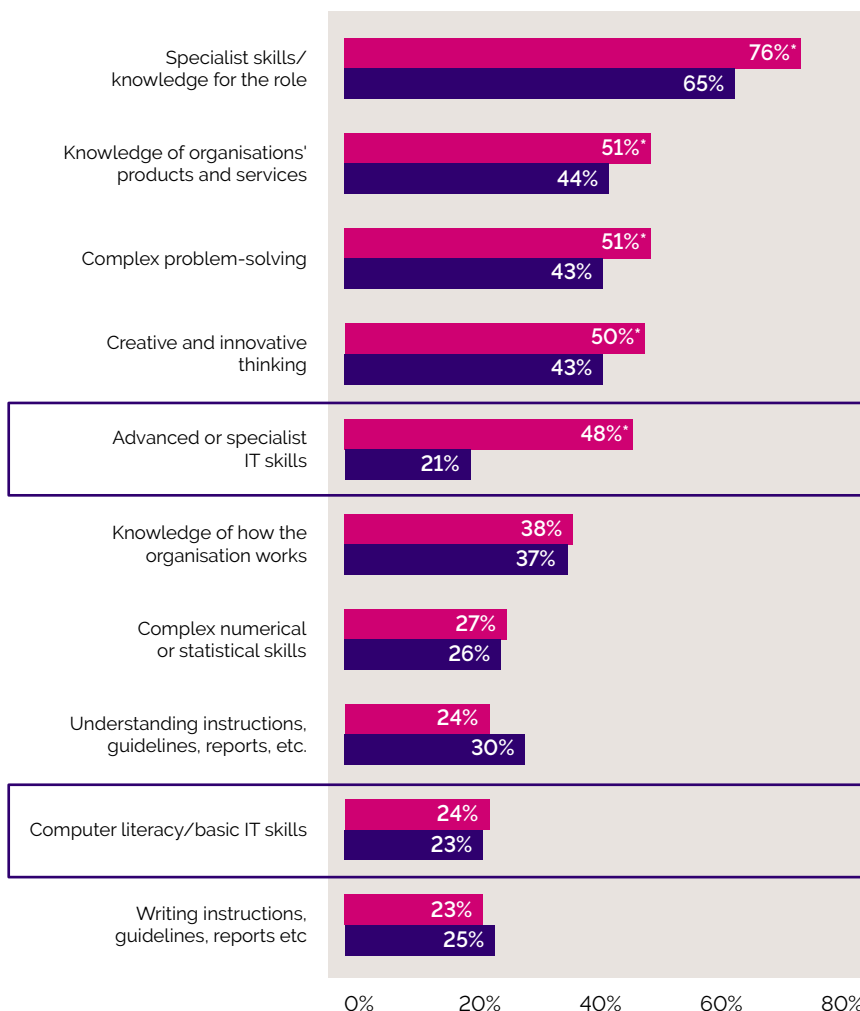
Looking in greater depth at the IT skills that are lacking (see Figure 3.4), creative industries employers pointed to a shortage of candidates with: specialist software, hardware or systems skills; graphic design or design engineering skills (including computer-aided design – CAD); application programming and development skills; data analysis and data science skills (using software such as R, SPSS, SAS and SQL); and skills in basic and advanced Microsoft Office. Employers in the creative industries were also slightly (but statistically significantly) more likely than other employers to report a lack of candidates with necessary animation or multimedia production skills.

Moving to soft skills, or people skills, the most difficult skills to find in the creative industries were: time management (41% of creative industries employers with a skills shortage vacancy), customer handling skills (40%), sales skills (32%) and persuading and influencing others (30%).

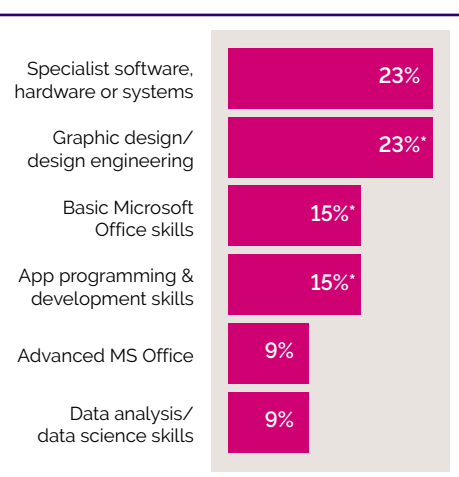
Further, 29% of the creative industries employers reported that it was difficult to recruit people with skills in managing or motivating staff. While this is not statistically different to the picture for all employers, this suggests significant risks that creative businesses will have difficulty identifying growing skills requirements among their workforce, nurturing talent and promoting both investment in and use of skills needed to drive ongoing performance improvements in future.

Figure 3.4: Skills found difficult to obtain from applicants in the creative industries vs all industries, 2022 (% employers with a skills shortage vacancy citing a deficiency in this area)

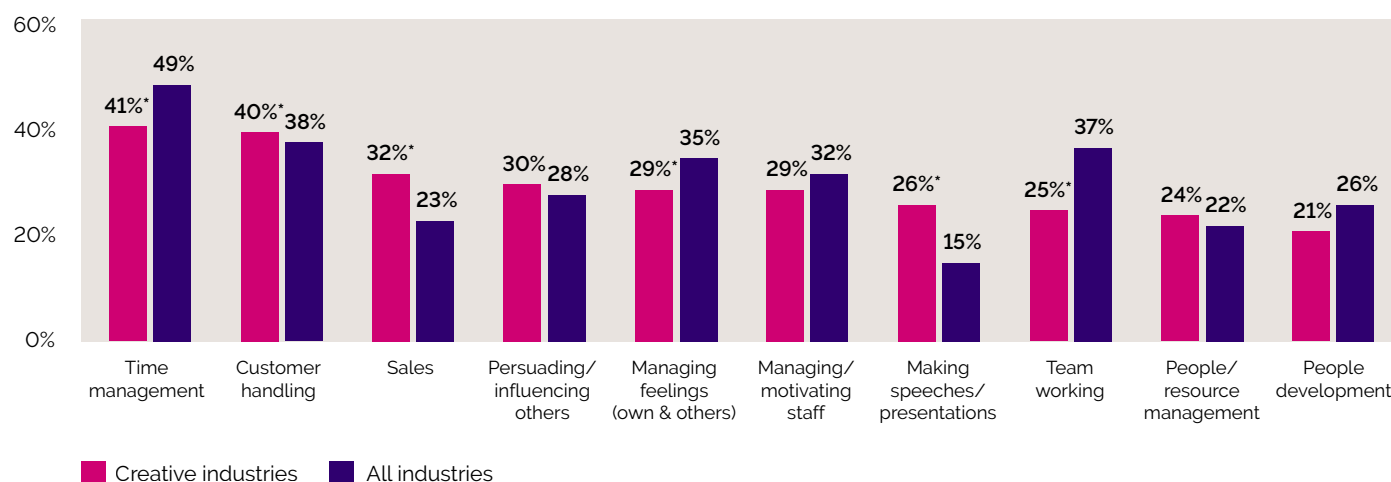
Technical/practical skills



IT skills



Soft/people skills



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Notes: Employer base: all establishments with skills shortage vacancies (n = 304) or with skills shortage vacancies caused by a lack of IT skills (n = 161). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

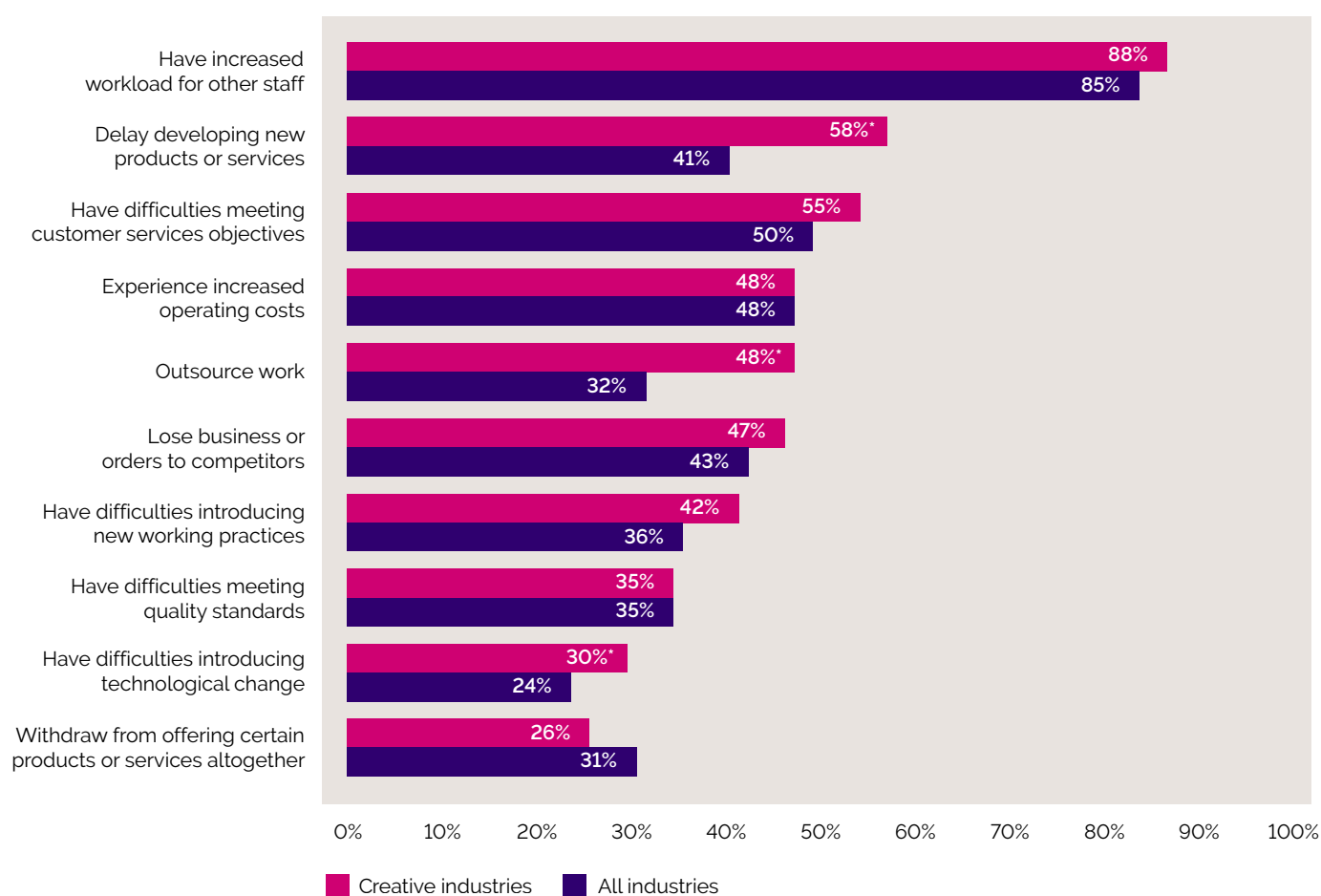
3.3 Impact and response to skills shortages in the creative industries

For those creative industries employers experiencing them, skills shortages have a significant impact. Nearly 9 in 10 (88%) of the employers in the sector that were experiencing skills shortage vacancies reported an increased workload for their other employees – broadly in line with the all industries' percentage (85%) (see Figure 3.5).

Skills shortages also hamper innovation in the creative industries: 58% of creative industries employers that were having skills shortage vacancies reported having to delay developing new products or services as a consequence, significantly higher than the all industries' average of 41%. They were also significantly

more likely to report having difficulties introducing technological change (30% of employers with skills shortages in the creative industries compared with 24% across all industries) and to have to outsource work (48% and 32%, respectively).

Figure 3.5: Implications of skills shortage vacancies in the creative industries vs all industries, 2022 (% employers with skills shortage vacancies)



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Notes: Employer base: all establishments with hard-to-fill vacancies that are all as a result of skills shortages (n = 284). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

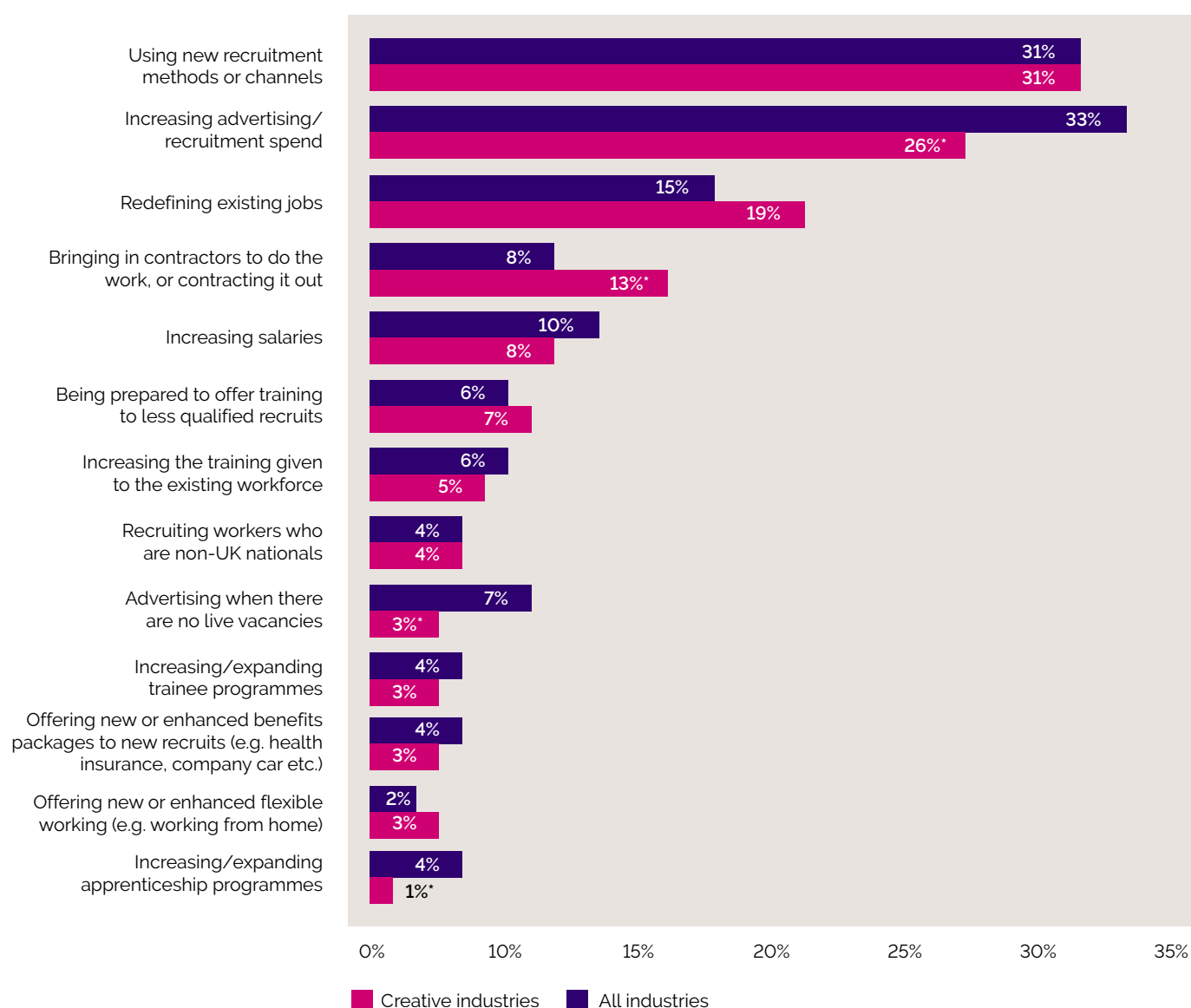
When asked about whether anything was being done as a direct response to the shortages, most creative industries employers (86%) said they had taken action, broadly in line with the share across all industries (88%).

The most commonly reported response to skills shortages in the creative industries was to use new recruitment methods or channels (31% for both creative industries employers and all employers). Around one in four (26%) of

creative industries employers had increased their advertising and recruitment spend – a significantly smaller proportion than across the economy (33%) (see Figure 3.6).

Creative industries employers were significantly more likely to bring in contractors or contract out work (13% compared with 8% all-industry employers), but less likely to advertise when they had no live vacancies (3% compared with 7%).

Figure 3.6: Response to skills shortage vacancies in the creative industries vs all industries, 2022 (% employers with skills shortage vacancies)



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Notes: Employer base: all establishments with hard-to-fill vacancies that are all as a result of skills shortages (n = 284). Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

4 Internal skills mismatches: skills gaps and under-utilisation

The knowledge, skills and competencies required in the workplace change continuously, driven by a range of factors – for example, artificial intelligence and wider technological advancement, patterns of consumption, methods of production and the ways firms are organised.

This means the skills of the workforce can quickly become outdated, particularly where employers and workers are not investing sufficiently in upskilling and reskilling, creating skills gaps. Alternatively, individual workers may hold higher-level qualifications, more advanced skills or participate in activities that strengthen their skills, knowledge, competencies and/or qualifications in a way that are not fully required or effectively utilised within their job – resulting in demand deficiencies.

While skills shortages (examined in Section 3) consider external skills deficiencies in the labour market, skills gaps and skills under-utilisation are internal measures of skills mismatch: skills gaps are where the skills that workers possess fall short of those needed to perform effectively in their roles and skills under-utilisation is where individuals report having higher skills than required for their current job.

It is important to note that skills shortages and skills gaps are interconnected. For example, if an employer faces recruitment difficulties, they may knowingly recruit a candidate who lacks some skills needed for the job, with the intention of then offering training so they reach the necessary level of competency.

In this section, we again draw on the Employer Skills Survey (ESS), which asks employers ‘How many of your existing staff would you regard as fully proficient at their job?’ The question is asked of specific occupational groups, with further investigation of the technical, IT and people skills that need improving; the main

causes of skills deficiencies; their impact on the business; and the steps employers have taken to overcome these challenges.

In addition to skills deficiencies (i.e. skills shortages and gaps), the analysis has also been able to use the ESS to explore deficiencies in demand – that is, where individuals report having higher skills than that required for their current job. As a result, this creates what is termed skills under-utilisation or under-employment. Where this skills mismatch also reflects a qualifications mismatch, it is referred to as over-qualification or over-education.

This data provides the basis for our assessment of the picture of skills gaps in the creative industries,⁸ as set out in this section.

Table 4.1: Headline measures of internal skills mismatches in the creative industries vs all industries, 2022

	Creative industries	All industries
% employers reporting skills gaps	11%	15%
Number of workers not fully proficient for their role	59,778	1,723,674
% workforce not fully proficient for their role	4.9%	5.7%
% employers with under-utilised staff	26%	35%

Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

4.1 Incidence and causes of skills gaps

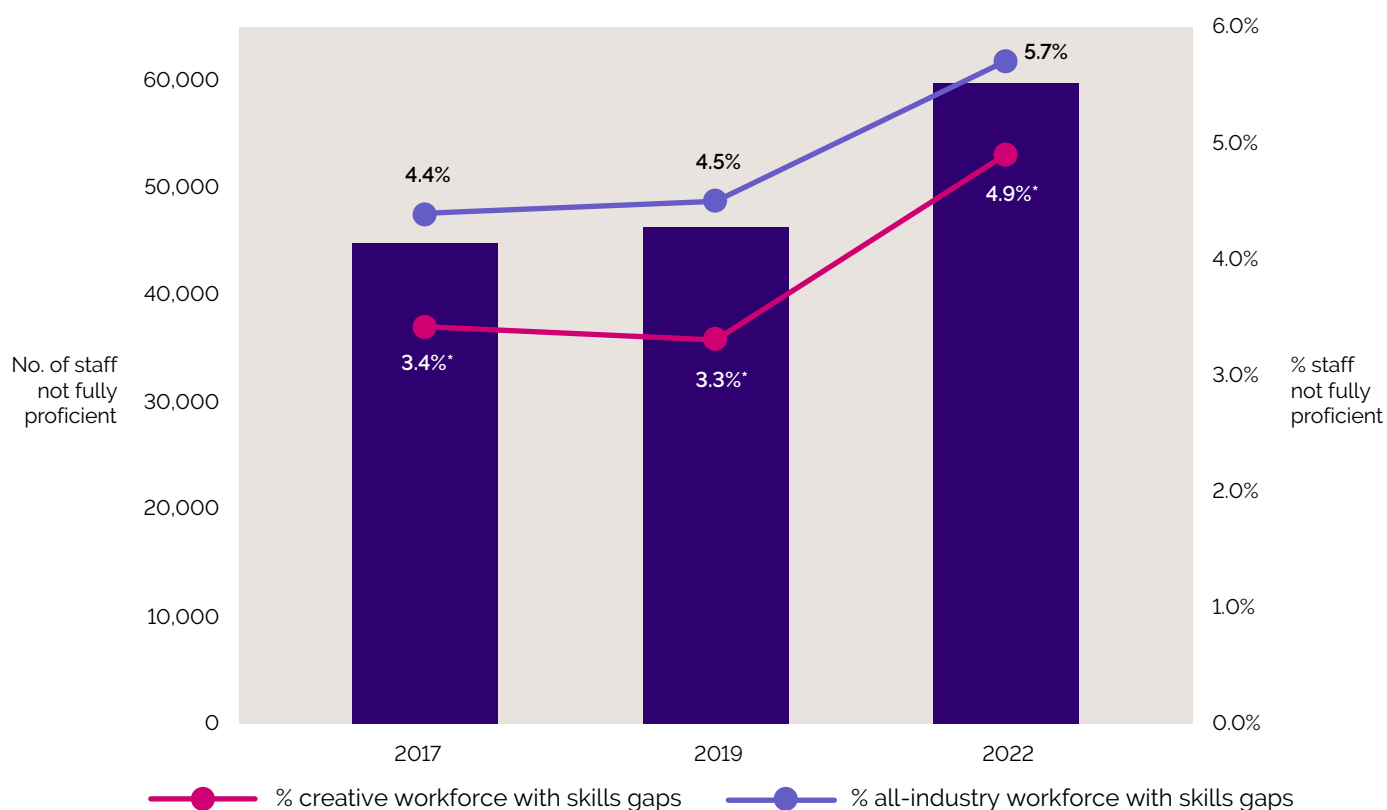
The latest results from the ESS 2022 show that 11% of creative industries employers' reported skills deficiencies among their current workforce – significantly below the UK economy average (15%). This amounts to nearly 60,000 creative industries workers not being fully proficient for their role – equivalent to 4.9% of the creative workforce, compared with 5.7% across all industries.

Also, skills gaps among the existing workforce are on the rise. Across the economy, the share of the UK workforce not fully proficient for their role jumped from 4.4% in 2017 to 5.7% in 2022: an increase of 1.3 percentage points. In the

creative industries, the increase was slightly higher, with an increase of 15,000 creative industries workers (or 1.5 percentage points) over the same period (see Figure 4.1).

8. These questions concern skills mismatches evidence for employees only and exclude creative freelancers.

Figure 4.1: Incidence of skills gaps over time, 2017, 2019, 2022



Source: Authors' elaboration based on Employer Skills Survey 2017, 2019 and 2022

Notes: Employer base: all establishments. Data for 2019 excludes Scotland. *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

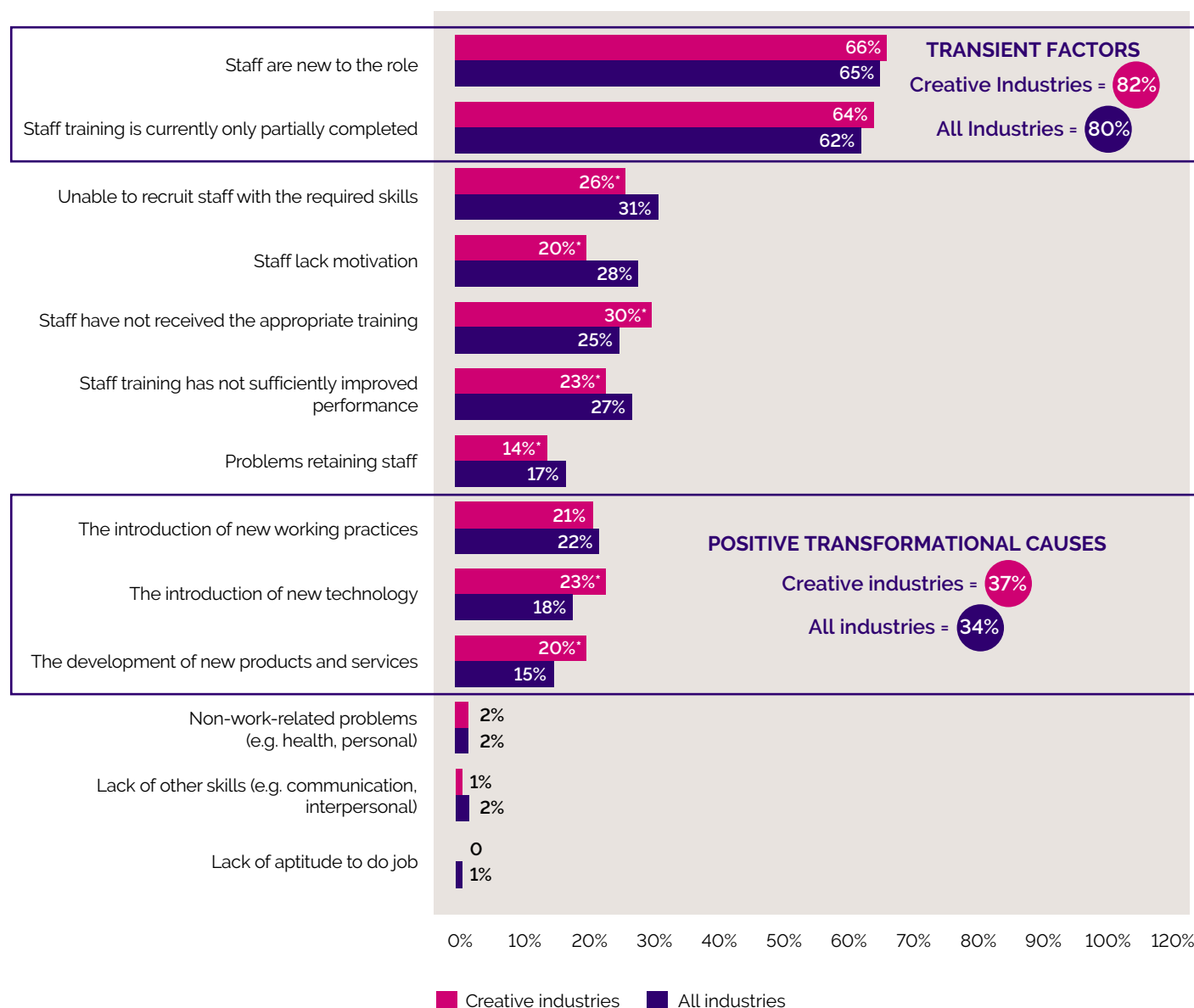
Skills gaps can occur for a range of reasons (Figure 4.2). In many cases, they are transitory, existing because staff are new to the role (this reason was cited by 66% of creative industries employers with skills gaps) or are yet to fully complete their training (64%). A similar share of creative industries employers and employers across the economy pointed to at least one of these transitory factors as the primary causes of skills deficiencies amongst their workforce (82% and 80% respectively).

Skills gaps can also be a sign of positive transformation of firms, brought about by technological advancement or product, process or workplace innovation. Indeed, in the creative industries, skills gaps are slightly more likely

to be associated with these factors. Among creative industries employers with skills gaps, 23% suggested they are a consequence of the introduction of new technology, and 20% said they were due to the introduction of new products or services – a significantly higher proportion than across all industries (18% and 15%, respectively).

However, a slightly higher, though statistically significant, share of employers in the creative industries suggested that skills gaps are primarily a consequence of staff not having received appropriate training, cited by 30% of creative industries employers compared with 25% of all employers.

Figure 4.2: Main causes of skills gaps in the creative industries vs all industries, 2022 (% employers with skills gaps)



Source: Authors' elaboration based on Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments with skills gaps (n = 468). Multi-response question. Figures for Transient Factors and Positive Transformational Causes refer to the share of establishments that have skills gaps that identify at least one of these options as the main cause of skills deficiencies amongst their workforce. Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

4.2 Skills gaps among the workforce

Those employers who were facing skills gaps were asked what skills needed improving among their employees. In line with the findings on the skills difficult to find externally in the labour market, the analysis points to the need for a blend of skills within the existing creative workforce.

Specialist skills or knowledge needed to perform the job were reported as lacking by most creative industries employers, cited by 68% of those with a skills gap – a significantly higher proportion than across all industries (55%) (see Figure 4.3). This is likely a reflection of the predominance of professional roles, as examined earlier. Perhaps unsurprisingly, employers in the creative industries were also significantly more likely to suggest the skills deficient among their workforce were complex problem-solving skills (54%, compared with 45% of all employers) and creative and innovative thinking (54% and 41%, respectively).

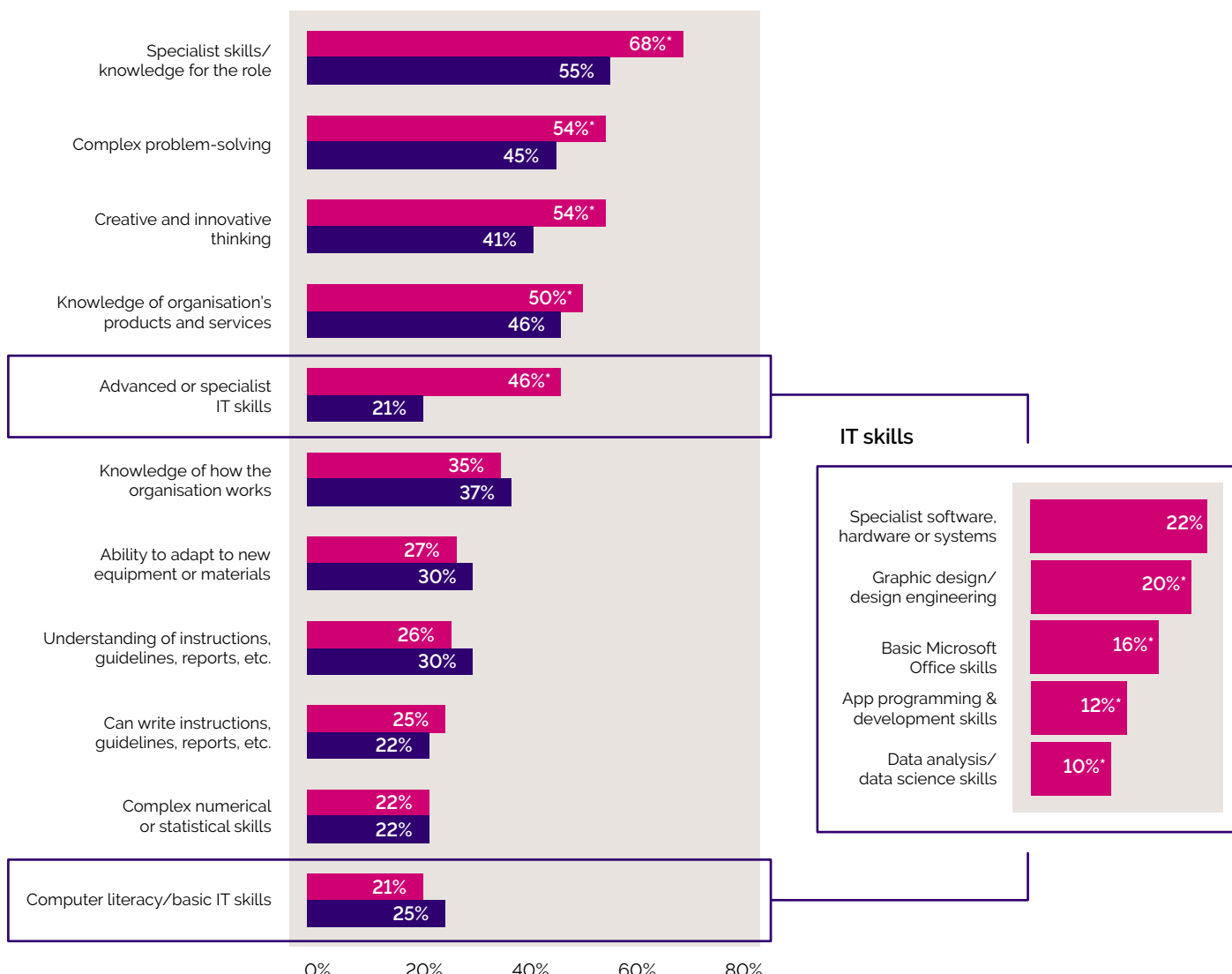
Furthermore, as for skills shortages, a critical challenge for creative industries employers lies in accessing advanced digital skills. Employers in the creative industries reporting skills gaps were more than twice as likely to point to the need for their workers to upgrade advanced or specialist IT skills (46% compared with 21% across all industries). As well as the need to strengthen specialist software, hardware and internal systems skills, creative industries

employers were four times as likely point to the need to improve graphic design/design engineering skills and multimedia production skills; and also significantly more likely to highlight deficiencies associated with data analysis and data science, database skills, web development, social media and digital marketing and app programming (Figure 4.3).

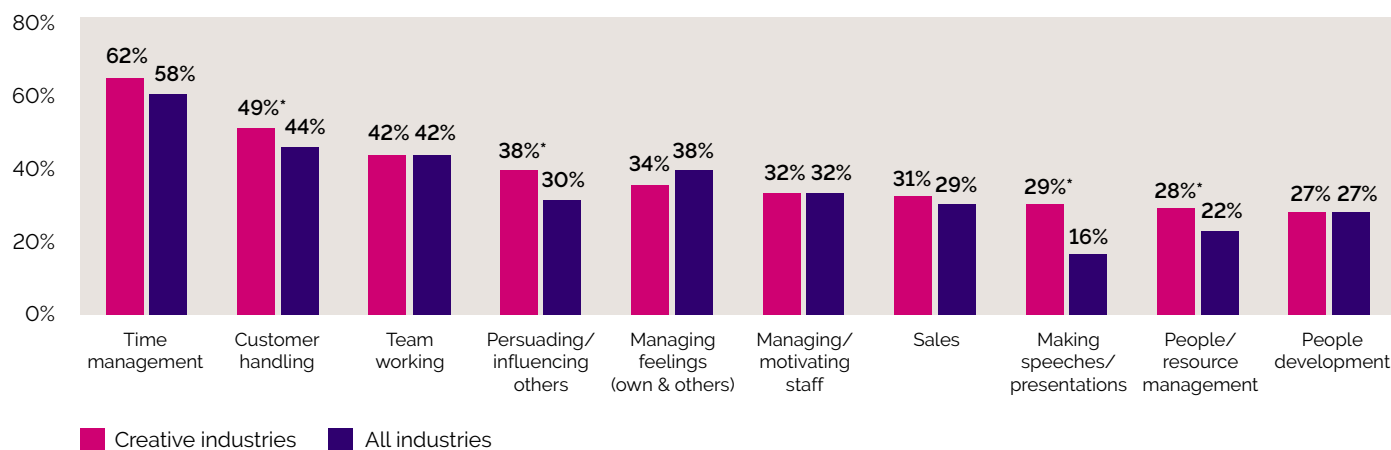
Transferable skills were also found to be deficient among the workforce, most commonly: the ability to manage own time and prioritise own tasks (cited by 62% of creative industries employers with skills gaps); customer handling skills (49%); and team working (42%). Interestingly too, in the context of increasing pressures on business performance, a range of management skills were also reported as being deficient. This included skills such as: persuading others (38%), managing or motivating staff (32%) and objective setting (28%). This may be an area warranting attention moving forward, as a basis to optimise productivity improvements through people.

Figure 4.3: Skills in need of improvement among the existing workforce in the creative industries vs all industries, 2022 (% employers with skills gaps)

Technical/practical skills



Soft/people skills



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all with skills gaps (n = 468) or with skills gaps caused by a lack of IT skills (n = 228). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

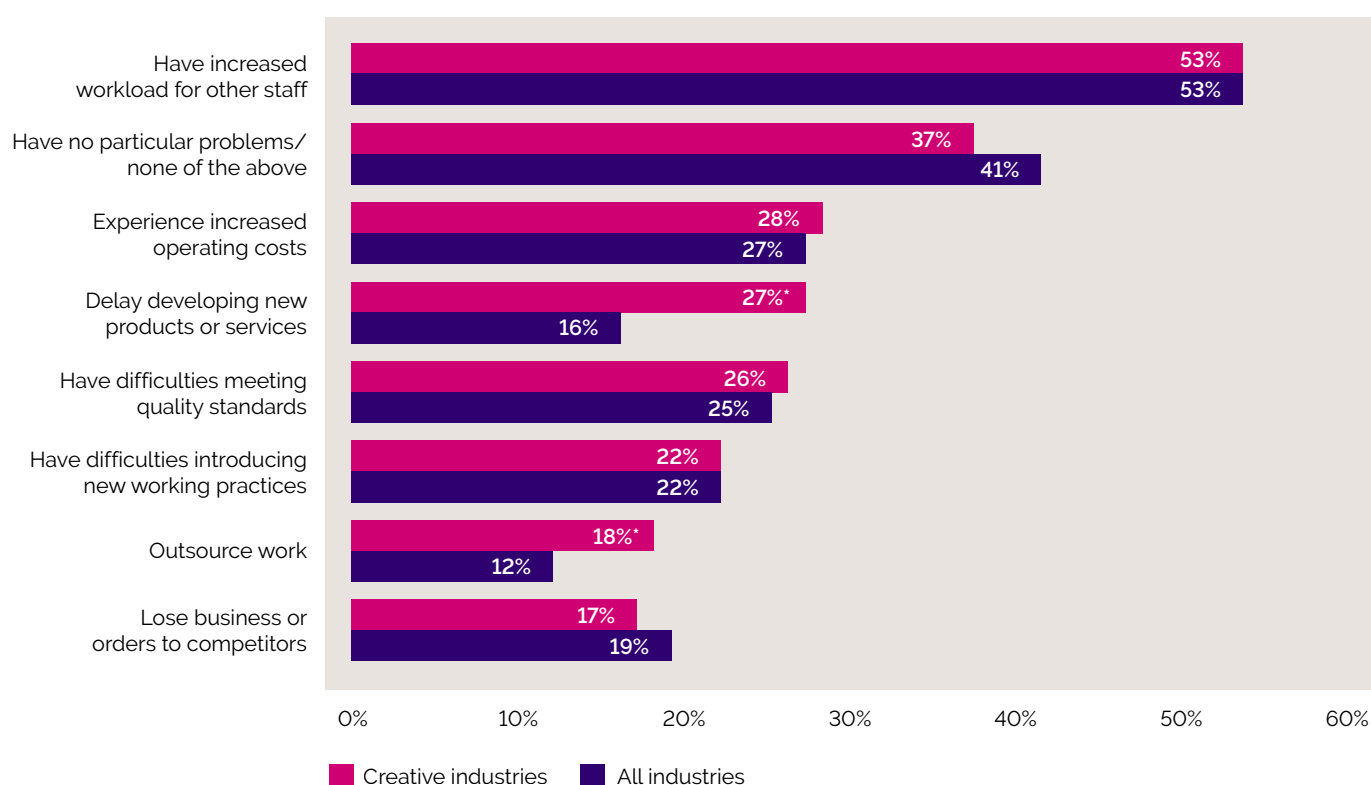
4.3 Impact and response to skills gaps in the creative industries

In exploring ways to enhance the management potential of creative businesses, it is useful to examine the impact of skills gaps among the workforce and what action creative industries employers are taking to overcome them.

Evidence from the ESS 2022 suggests that skills deficiencies among the existing workforce are an important concern for the creative industries. As for employers across the economy, the majority of creative businesses (53%) suggested that skills gaps are increasing the workload for other staff, while 28% reported higher operating costs (see Figure 4.4). Most notably, creative

industries employers were much more likely to suggest that skills deficiencies among their workforce is hampering innovation, with 27% of creative industries employers with skills gaps reporting having to delay developing new products or services compared with only 16% of employers across all industries.

Figure 4.4: Implications of skills gaps in the creative industries vs all industries, 2022 (% employers with skills gaps)



Source: Authors' elaboration based on Employer Skills Survey 2022 (DfE, 2023)

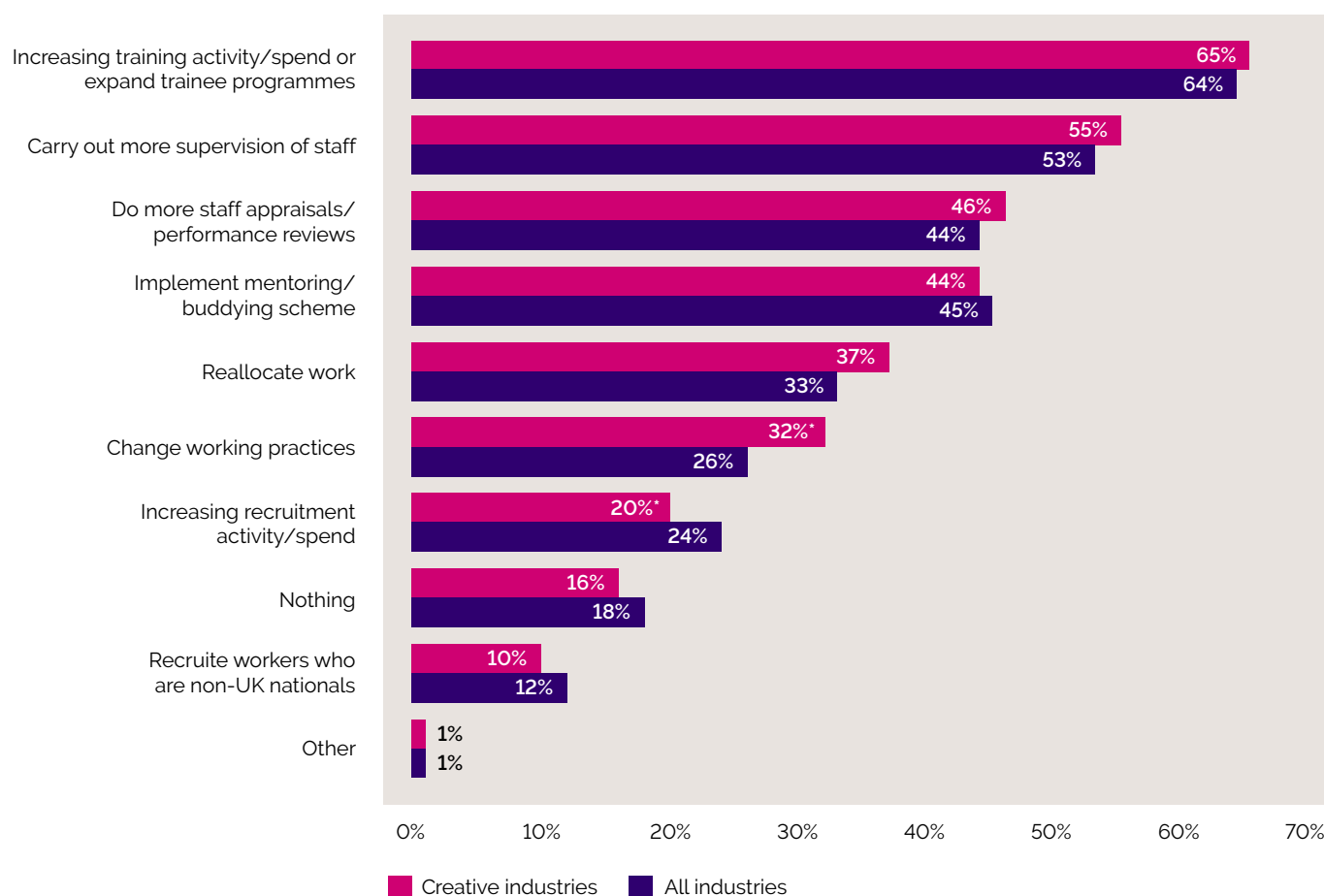
Note: Employer base: all establishments with skills gaps (n = 468). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

The majority of creative industries employers had taken steps to improve the proficiency of staff who have skills gaps, with only 16% taking no action (this is similar to the all-industry average of 18%).

As for the most common actions taken by creative industries employers to tackle skills gaps among existing staff, these were: to increase training activity and spend or to

increase or expand trainee programmes (65% of creative industries employers with a skills gap); or to provide more supervision of staff (55%) (see Figure 4.5). Again, this was similar to the national picture for the economy as a whole. Given this perspective, it's of interest to see how such aspirations translate into training activity (discussed further in Section 5).

Figure 4.5: Response to skills gaps in the creative industries vs all industries, 2022 (% employers with skills gaps)



Source: Authors' elaboration based on Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments with skills gaps (n = 468). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

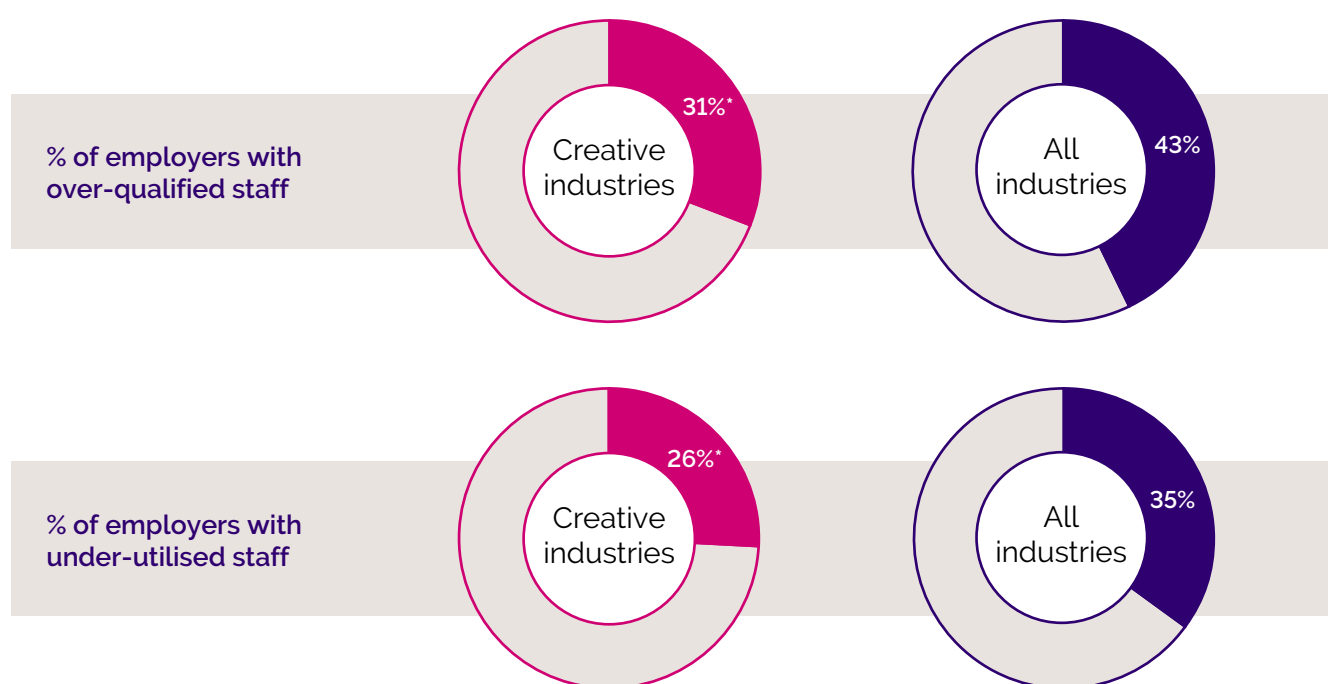
4.4 Skills under-utilisation

Finally, we explore employer perspectives on 'skills under-utilisation'. This is where employees have more skills and/or qualifications than are actually needed to do the job.

This has been a concern where levels of skills under-utilisation continually increase over time, as it not only raises questions about the adequacy and relevance of training to employers but also the extent of employers' ambition and management practices – that is, whether they are sufficiently adjusting the employment requirements to make full use of the capabilities of their workforce to drive business development and performance improvements.

With this definition, the ESS 2022 reveals that 26% of creative industries employers reported their staff are under-utilised – that is, they have at least one employee who has more qualifications and skills than the job actually requires (see Figure 4.6). This was significantly lower than the percentage for the whole economy (with 35% of employers reporting under-utilisation).

Figure 4.6: Skills under-utilisation in the creative industries vs all industries, 2022



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Notes: Employer base: all establishments (n = 747). Under-utilised staff are those that have both qualifications and skills that are more advanced than required for their current job. *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

5

Employer ambition and investment in skills

Ensuring a ready supply of suitably skilled talent will undoubtedly be important to the future success of the creative industries. As businesses grow their ambitions and develop their businesses, so too will they need to develop their workforce. Yet, unless these skills are put to full use in the workplace – to enhance competitiveness, to expand and to innovate – the returns to skills investment will not be fully realised.

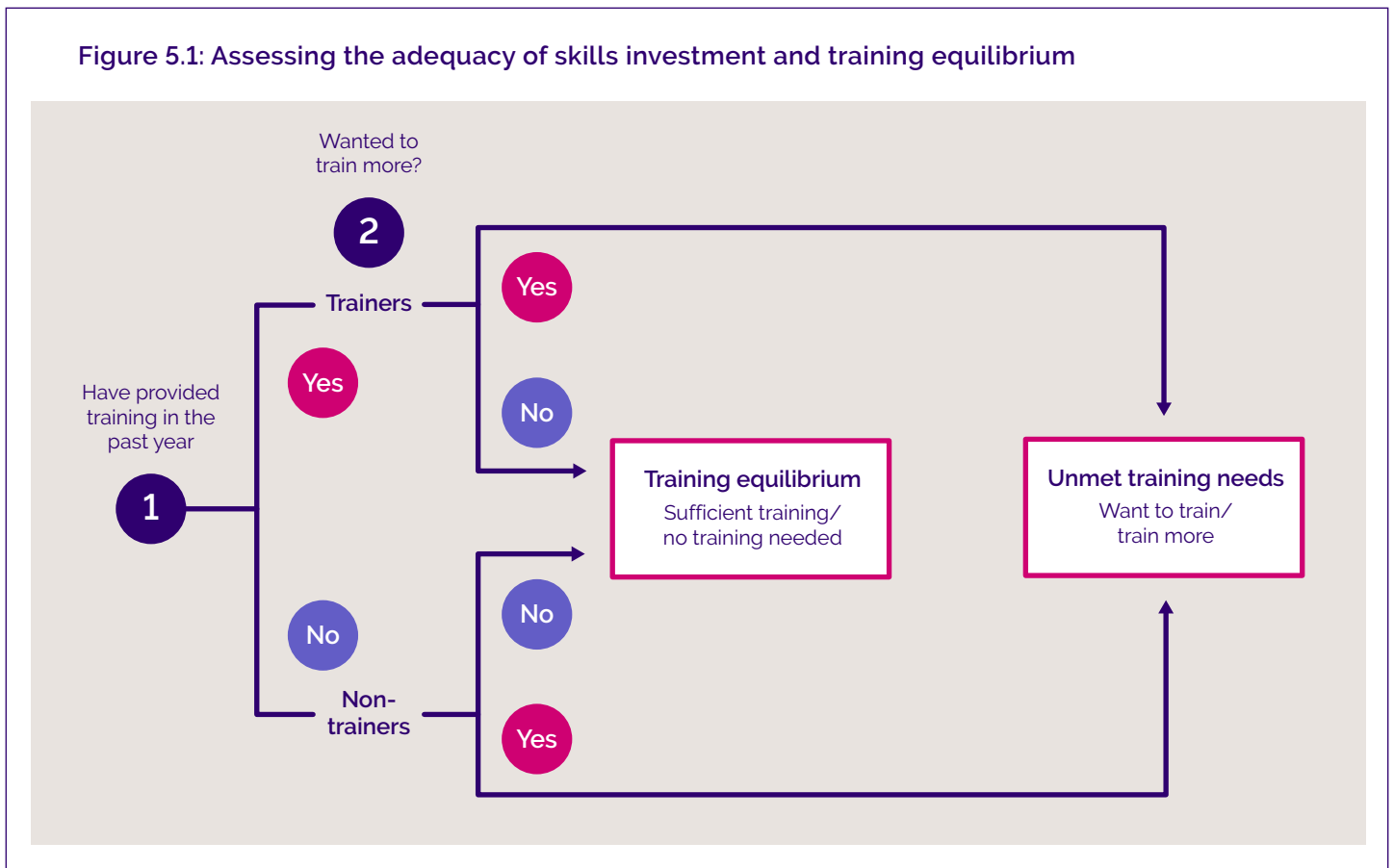
Understanding the ‘demand side’ is, therefore, important. In this context, this means the ambition of employers to invest in and utilise the skills of their workforce to achieve higher levels of productivity and performance – that is, the extent to which they see investment in learning and development that upgrades these skills as being as important as investment in new machinery, premises or technology to remain competitive as global markets continually evolve. It is also vital to recognise that the managerial approaches they adopt – from the way jobs are designed and work is organised to how workers go about their jobs and the work environments within which they do so – will be critical to truly unlocking the talent of their workforce.

In this final findings section, we explore this side of the Labour Market Framework, examining employer ambition and investment in skills in the creative industries. Once again, we draw on evidence from the Employer Skills Survey (ESS) 2022 to better understand the expectations of creative industries employers and whether they anticipate a need to upgrade workforce skills in the year ahead.

The survey also allows us to examine employer investment in skills and whether employers view current levels of skills investment and training activity as adequate. This includes

the perceptions of both those employers that trained and those that did not, recognising that employers can sometimes have unrecognised training needs (for instance, due to information failures) or can underinvest in training (for fear of poaching, short-termism or difficulty judging the benefits of training) (see Stanfield, Sloan, Cox, & Stone, 2009). The intention is to understand whether employers perceive that they are meeting their own training needs and therefore operating within a training equilibrium or whether they have unmet training needs.

Figure 5.1: Assessing the adequacy of skills investment and training equilibrium



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

For those that have provided training, we examine the extent of skills investment and the type of training undertaken. We also look at the kinds of training providers creative industries employers turn to in order to access training. Increasingly, a key concern in a modern, knowledge-intensive economy is exploring the extent to which creative industries employers collaborate with other employers to develop skills or expertise in the workforce. These practices support networking and knowledge diffusion and transfer.

In this context, collaboration can enable employers to pool resources and share the benefits of working sector-wide, with providers,

to secure relevant responsive and high-quality training. Examining the reasons why employers don't train and the barriers that inhibit further skills investment provides a further sense of creative industries employers' skills investment and utilisation strategies.

Finally, this section considers whether creative industries employers are deploying wider people-orientated organisational and management practices that ultimately value talent and seek to unlock the full potential of workers to drive business performance.

5.1 Skills priorities for the future

Firstly, we examine creative industries employers' expectations for the future and whether they anticipate the need to upskill their workforce in the year ahead. Interestingly, the data suggests a high level of sector ambition. Indeed, 69% of employers in the creative industries said that they expect that their employees will need to upgrade their skills in the next 12 months – a significantly higher share than across all industries 62% (Table 5.1).

Table 5.1: Headline measures of employer ambition and investment in skills in the creative industries vs all industries, 2022

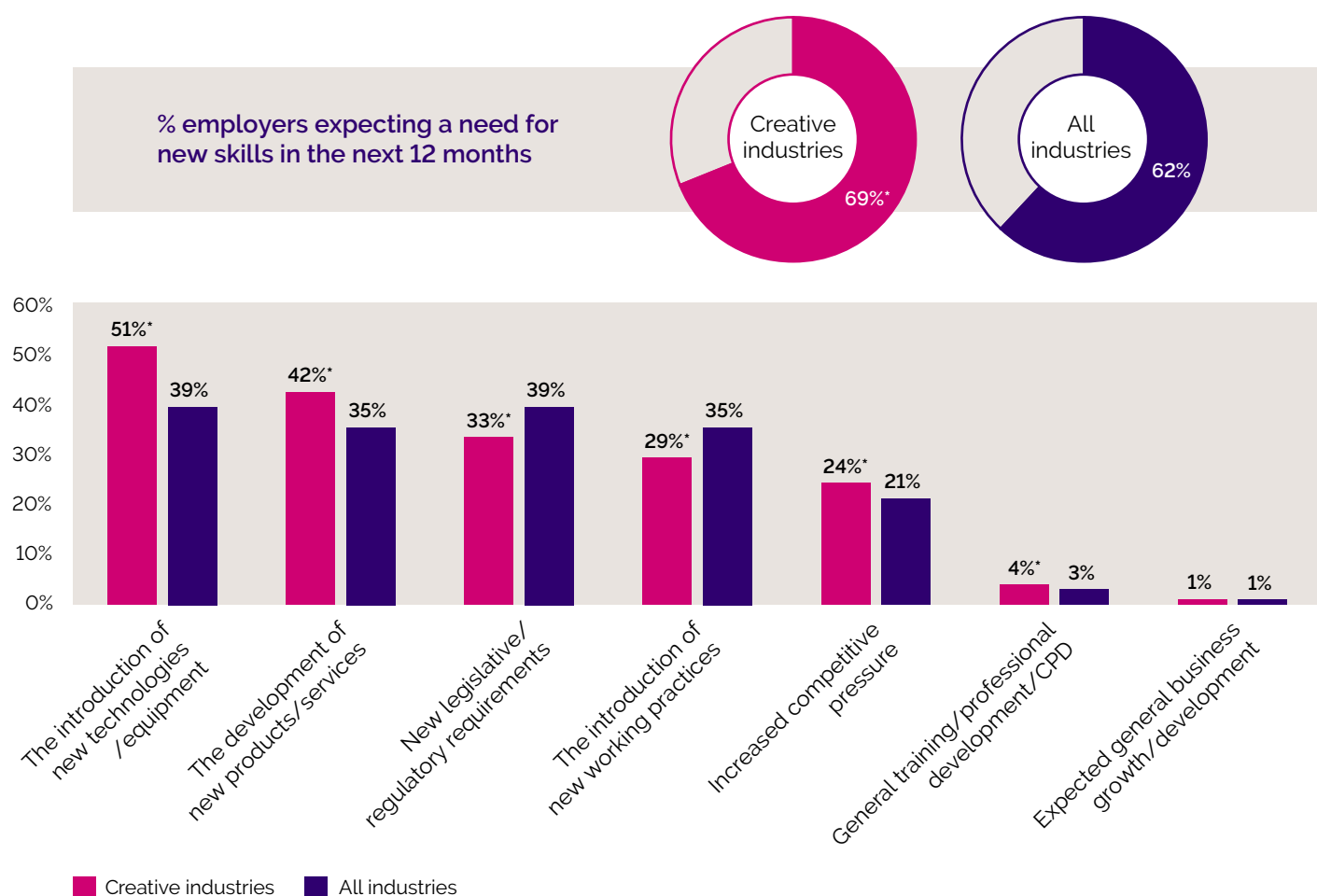
	Creative industries	All industries
% employers expecting a need for new skills in the next 12 months	69%	62%
% employers providing training for their workforce in the past year	55%	60%
% staff receiving training	56%	60%
Training days per trainee	5.5	6.0
% employers providing accredited training for their workforce	16%	26%
% employers in training equilibrium	55%	57%
% employers with unmet training needs	45%	43%
% employers adopting 7+ high-performance workplace practices	10%	8%

Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Employers in the creative industries who believed that skills would need to increase in future were asked their views on the main reasons behind this. As shown in Figure 5.2, a considerably higher share of creative industries employers compared with all employers pointed to the introduction of new technologies or equipment (51% and 39%, respectively) and the development of new products and services

(42% and 35%, respectively). This suggests that technological advancement and innovation will remain key drivers of skills needs in the creative industries in the years ahead. In a context where the Growth Mission and Industrial Strategy are driving forces, this points to a significant future opportunity, but clearly a growing tension will be the need for significant investment to fully realise this potential.

Figure 5.2: Reasons for expected need for new skills in the year ahead in the creative industries vs all industries, 2022



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments that would have provided more training in the past 12 months if they could (n = 1,069).

*Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

Like employers across the economy, around half of creative industries employers anticipated a need to develop specialist skills or knowledge needed for the role (cited by 52% of creative industries employers that anticipate upskilling needs in the next 12 months) (see Figure 5.3).

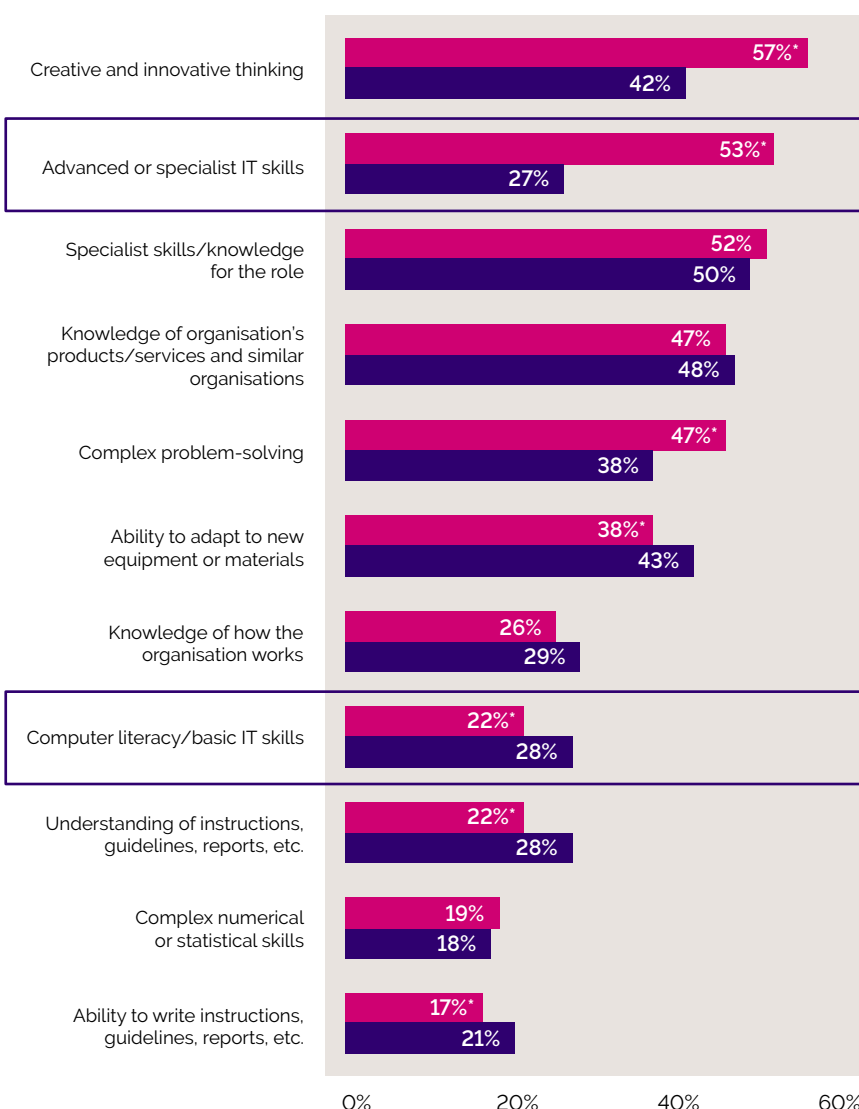
Creative industries employers were significantly more likely to report the need to develop creative and innovative thinking (57%, compared with 42% across all industries) and advanced or specialist IT skills (53%, compared with 27%). Complex problem-solving was also cited much more frequently among employers in the creative industries than in other sectors of the economy (47% and 38%, respectively).

Looking in greater detail, many of the IT skills that are expected to need development in future are those that employers already identify as being in deficient among applicants or their workforce today (see sections 3 and 4) – namely: using new or updated company software or systems; graphic design or design engineering; web development; and specialist software, hardware or systems skills.

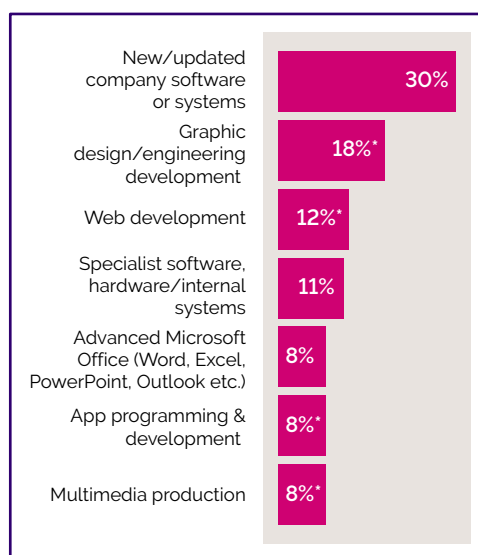
The development of meta-skills is also identified as important. Like employers across the economy, creative industries employers in particular pointed to a need to develop time management skills (43%), customer handling (31%) and team working (30%).

Figure 5.3: Skills that will need developing in the year ahead in the creative industries vs all industries, 2022

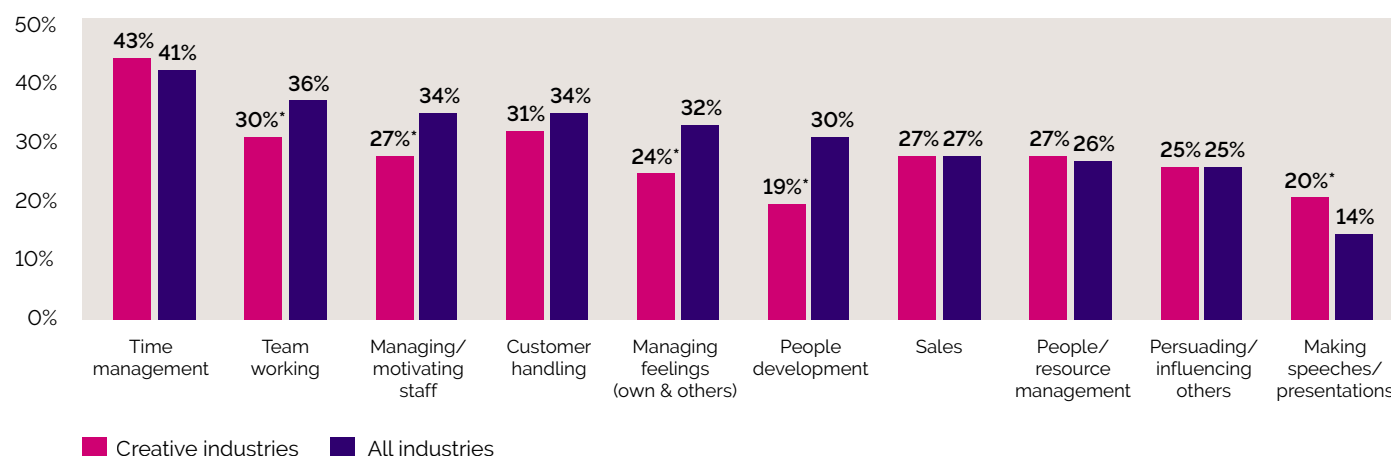
Technical/practical skills



IT skills



Soft/people skills



Source: Authors' elaboration based on Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments that anticipate a need for new skills in the next 12 months (n = 463) or that anticipate a need for new IT skills in the next 12 months (n = 275). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

5.2 Employer training provision in the creative industries

In reflecting on the substantial skills gaps (discussed in the previous section) and the anticipated need to develop new skills, an important question concerns whether creative industries employers are investing sufficiently in upskilling and reskilling their workforce and whether they recognise the need to grow their skills investment.

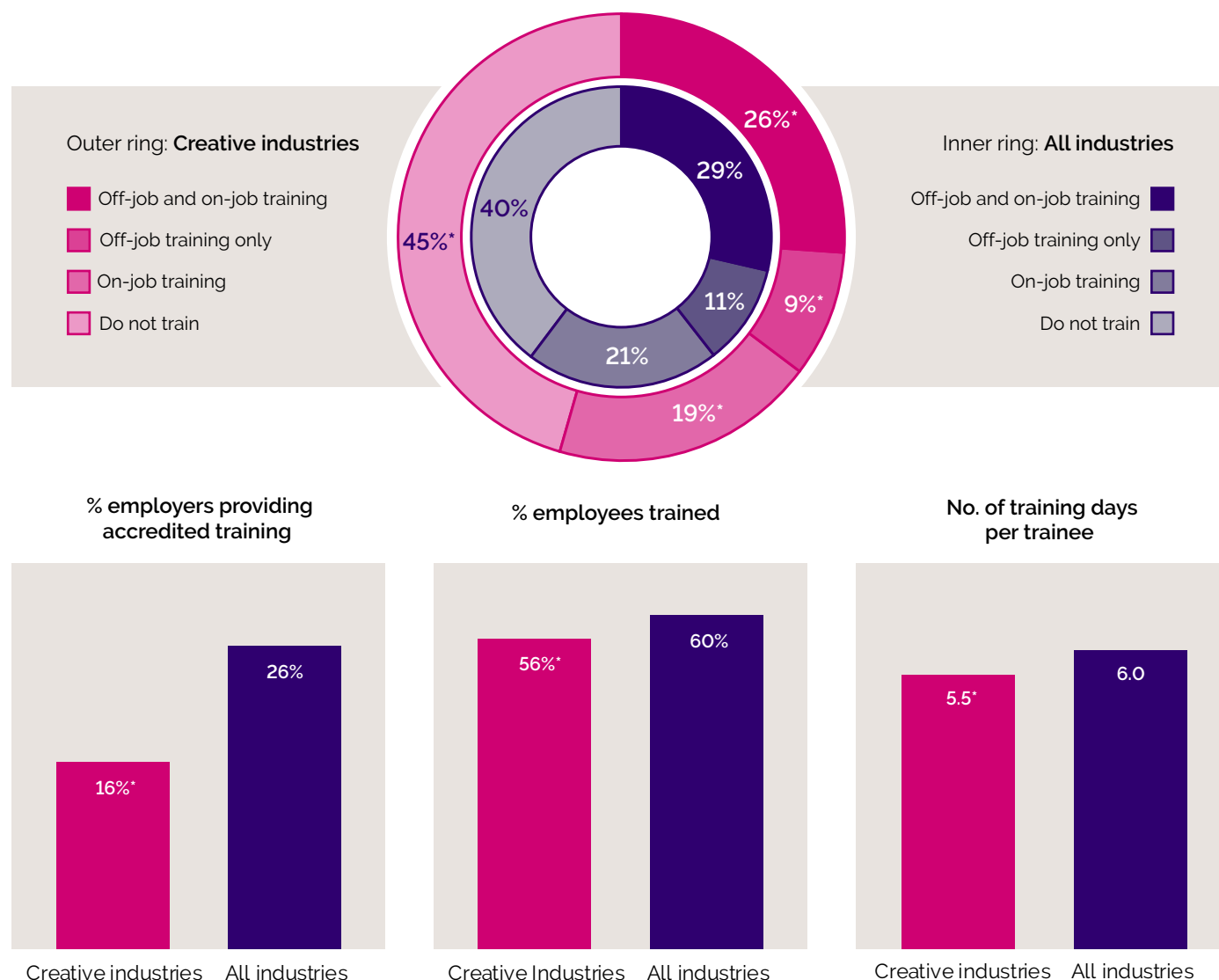
The majority of employers (55%) in the creative industries had funded or arranged training for their workforce in the past 12 months – a slightly (but statistically significant) lower proportion than across all industries (60%). This marks a reduction since the last survey in 2017 (from 62%) and means that nearly half (45%) of creative industries employers had not provided training for their workforce in the year preceding the survey.

Further analysis also calls into question the extent, and adequacy, of skills investment (see Figure 5.4). Creative industries employers were significantly less likely to have provided training towards a nationally recognised qualification (16%, compared with 26% of all employers). This marks a reduction compared with the 2016 Employer Perspectives Survey, which showed that 28% of creative industries employers had provided accredited training. Further, even where creative industries employers had invested in training, trainees tended to receive marginally fewer days of training compared

with their counterparts in other industries (5.5 days compared with 6.0 days) (see Figure 5.4). Creative businesses that do provide training also tended to do so for a slightly smaller share of their workforce (56% of employees, compared with 60% of employees in businesses providing training across the economy).

This will, at least in part, reflect the structure of the industry, with a high proportion of small and micro-sized businesses. However, it also suggests that despite policy aspirations to improve the relevance of national qualifications to industry needs, and to use qualifications as a recognised symbol of quality, engagement in formally recognised training has been declining in the creative sector. This echoes the findings of wider research by the Creative PEC and others (Carey, Giles, & O'Brien, 2023; Screen Sectors Skills Task Force, 2023), and in a context of ongoing shifts in the economy and evolving skills needs, it raises significant concerns for the creative industries sector.

Figure 5.4: The scale and intensity of training in the creative industries vs all industries, 2022



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: for the incidence of training and accredited training, the base is all establishments (n = 3,231); when examining the share of employees receiving training and the average number of training days per trainee, the base is establishments providing training (n = 1,997). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

It is also of interest to review the type of training provided by creative industries employers, to enable an assessment of its relevance and value. Just as for employers across the economy, the most significant focus of training in the creative industries was job-specific training, offered by 83% of creative industries employers that had provided training (see Figure 5.5).

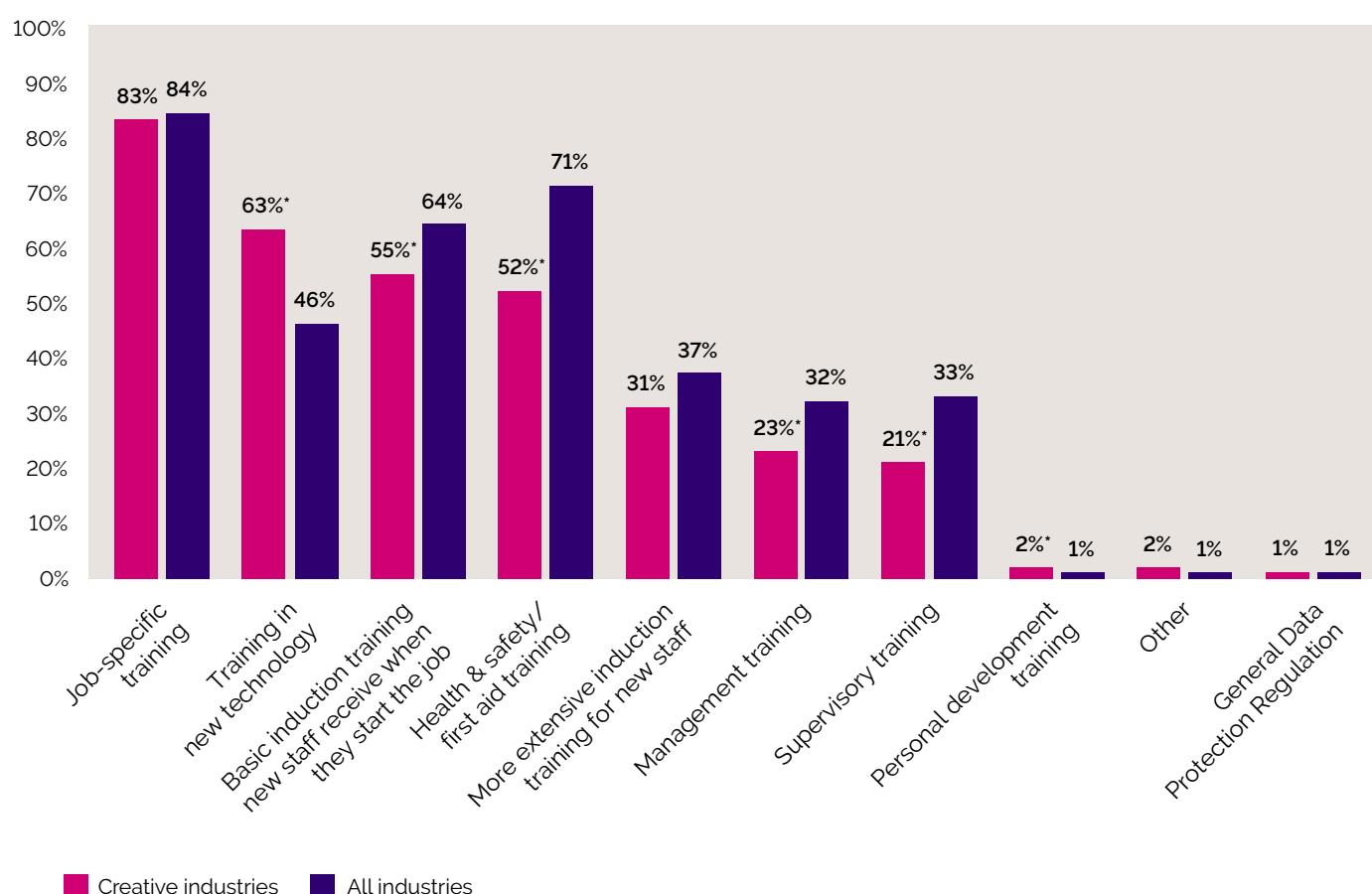
However, given the dominance of high-value and technologically driven activities in the creative industries, creative industries employers were significantly more likely to have offered training in new technology: 63% of creative businesses that had provided training, compared to 46% of all training employers. At the same time, compared with the picture across the economy, there was less of a focus

on basic induction training and/or health and safety requirements (55%, compared with 64% across the economy).

Further, just over one in five creative industries employers that offered training, provided

management and supervisory training for staff (23% and 21%, respectively) – a statistically significant shortfall in the region of 10 percentage points compared with employers across the economy.

Figure 5.5: Type of training in the creative industries vs all industries, 2022 (% of employers providing training)



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments providing training (n = 1,997). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

Creative industries employers were significantly less likely to turn to external providers to deliver training. Indeed, these providers were used by 51% of employers in the creative industries that had provided training compared with 57% across all industries in the last year (see Figure 5.6). Further, the vast majority (78%) of those that did so turned to private sector and commercial organisations, broadly in line with

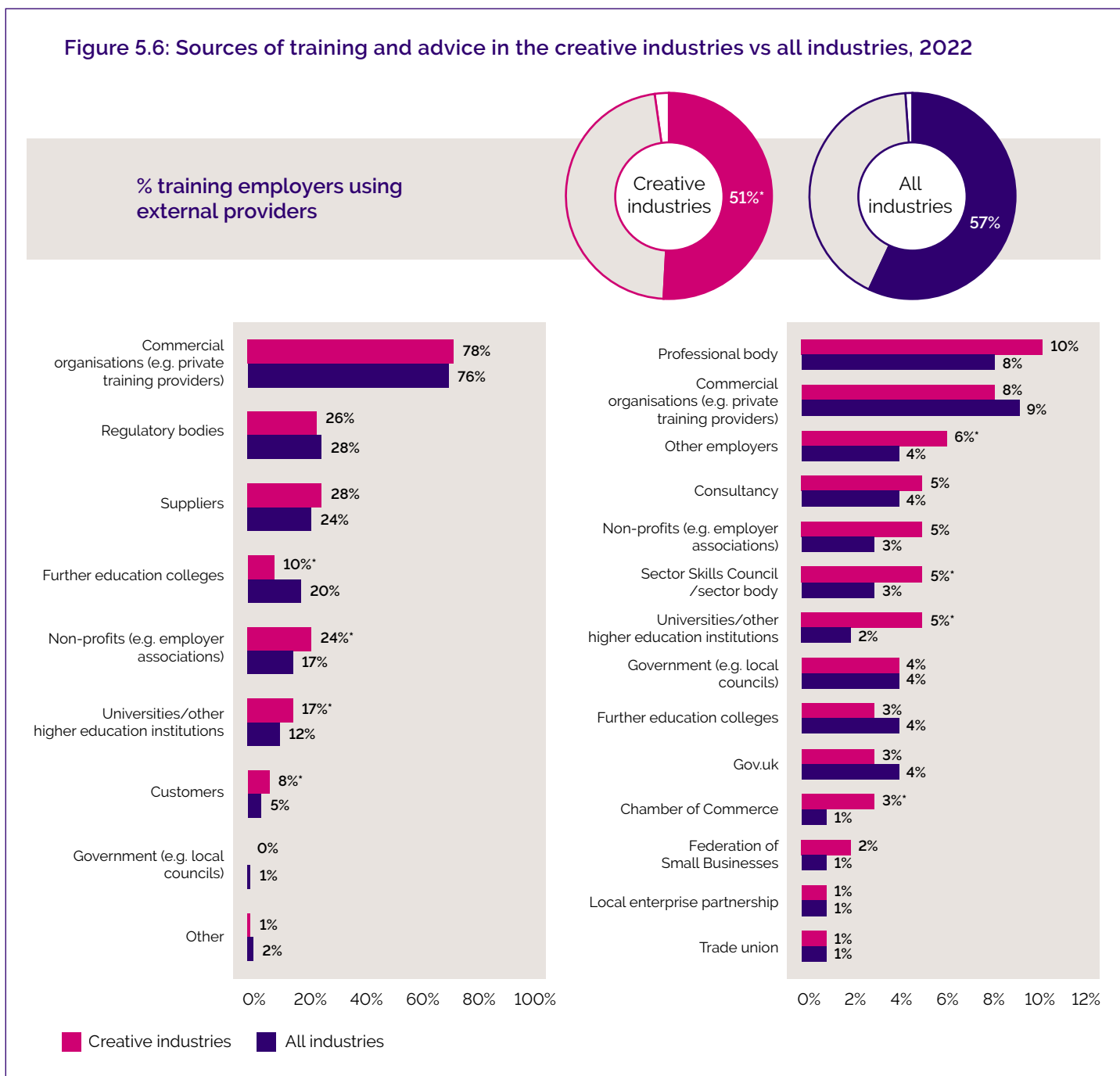
the picture across all industries (76%). While creative industries employers were significantly more likely to work with universities or other higher education institutions to provide training (17% training employers compared with 12% across all industries), they were half as likely to look to further education colleges to access training for staff (10% compared with 20% of all training employers). This is perhaps unsurprising

given the levels of the workforce holding qualifications at degree level or higher. Yet, with policy developments to strengthen technical training routes in future and offer more flexible, modular training across further and higher education, this picture may change.

The sources to which creative industries employers turned for external information,

advice or practical help were broadly similar. However, employers in the creative industries were significantly more likely to approach a collective or representative body than employers as a whole (16% of creative industries employers compared with 12% across all industries) and, in particular, a professional body, Sector Skills Council or other sector body.

Figure 5.6: Sources of training and advice in the creative industries vs all industries, 2022



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: for questions concerning training, the base is all establishments providing training (n = 1,997); when examining where establishments have received advice or help on skills- and training-related issues, the base is all establishments in Module B of the ESS sample only (n = 637). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

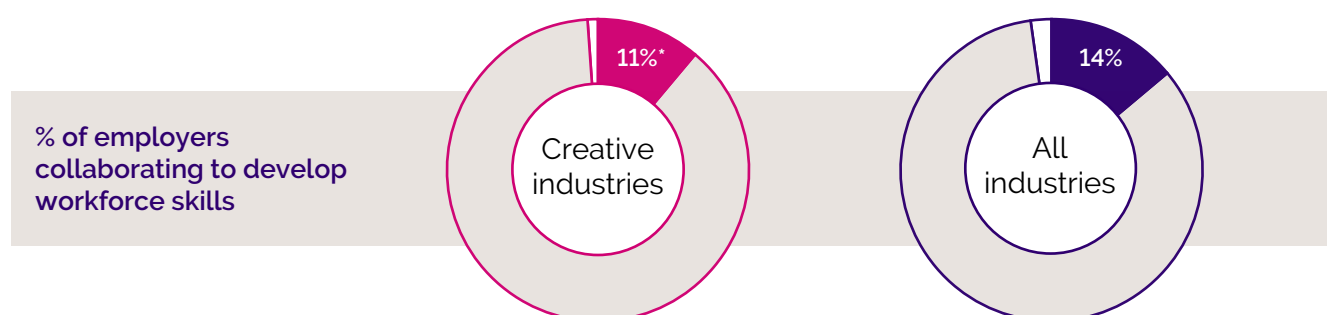
With growing evidence that bringing business communities with common skills interests together (so-called communities of practice) to work around shared goals can prove effective in securing and sustaining employer engagement in skills investments to drive performance improvements, collaboration is being encouraged in local communities and business clusters (Nathan, 2013; Reeves, 2024). This is based on the recognition that agglomeration and colocation really matter in strengthening local assets and innovation and skills ecosystems. For instance, agglomeration can bring significant advantages from a critical mass of businesses, workers and institutions in the local infrastructure and, in particular, dense networks of partners, providers, suppliers and collaborators. This is especially in terms of facilitating access to resources, skills and ideas and, hence, stimulating innovation through better knowledge transfer and learning.

Collaboration provides a key mechanism to raise levels of employer commitment to training, upskilling and reskilling, as well as a means to tackle any persistent market failures, such as fears of poaching, time, cost and financial constraints and coordination failures (UKCES, 2009). This is particularly relevant for small and medium-sized enterprises, which tend to have more limited resources, capacity and capability to act alone. Business communities are often organised by sector, but employer engagement can also be progressed through other business

networks, such as in geographical areas, as with the Local Skills Improvement Partnerships in England and Regional Economic Partnerships in Scotland. A range of employer intermediaries, industry groups, and trade and professional bodies often promote coordination; this includes trade unions as well as government agencies such as Skills Development Scotland and formerly the Institute For Apprenticeships and Technical Education. As the delivery infrastructure evolves, so too do the potential mechanisms for coordination, as seen with the recent establishment of Skills England.

Despite these policy aspirations, current practices suggest that there is not a deep tradition for collaborative working consistently across the UK economy, and as such partnerships are presently not well or widely established among creative industries employers in the UK either. Indeed, only 11% of creative industries employers work with other employers to develop skills or expertise in the workforce, slightly (but significantly) below the average across all industries (14%) (see Figure 5.7), but falling significantly short of practice seen in other OECD countries (OECD, 2019). This picture has persisted over time. Wider incentives such as the Apprenticeship Levy, which has run since 2017 in the UK, have also failed to stimulate greater industry collaboration and promote the culture for the collective investment that is evident abroad (OECD, 2021).

Figure 5.7: Employer collaboration to develop skills in the creative industries vs all industries, 2022



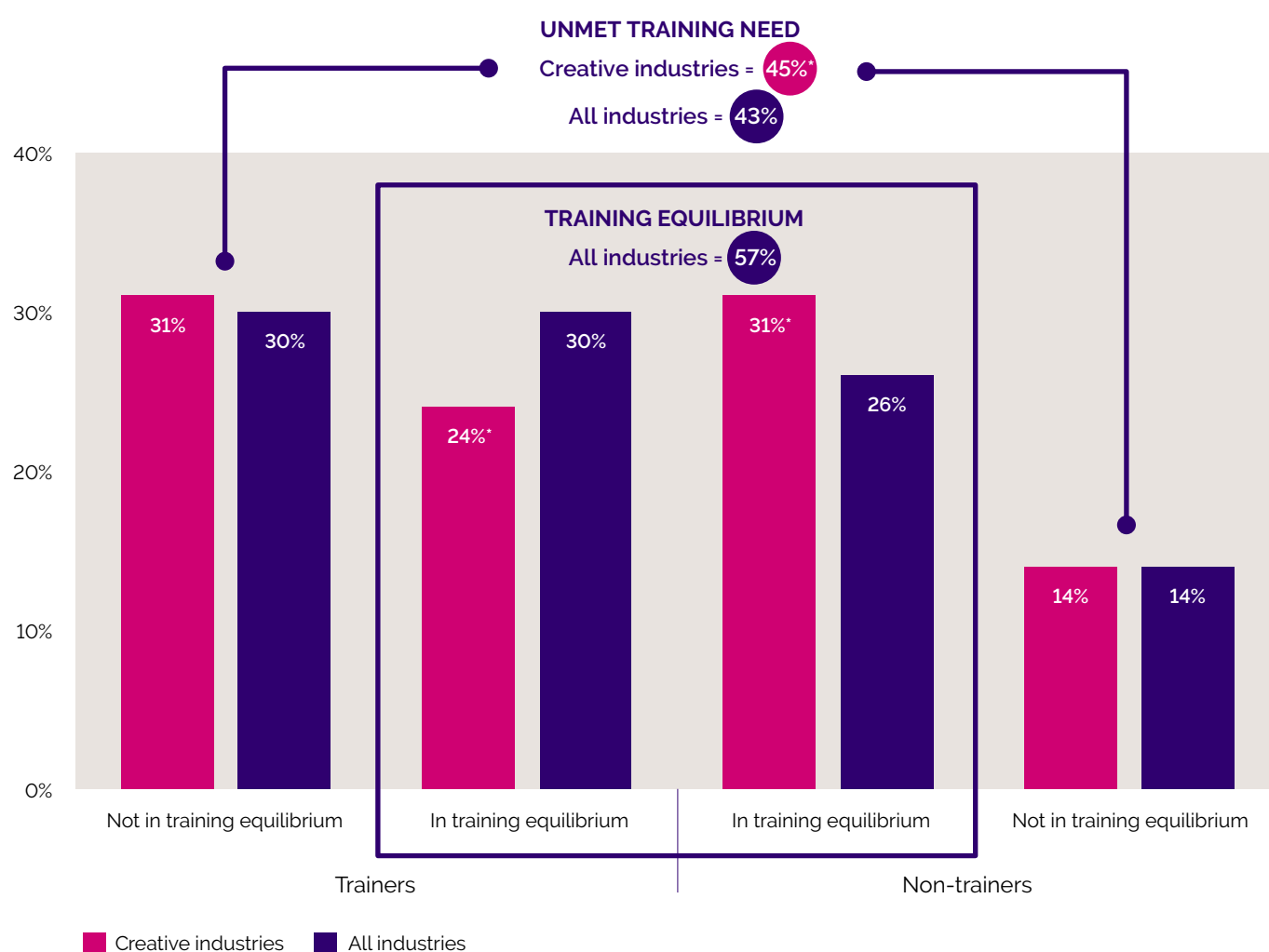
Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments in Module B of the ESS sample only (n = 637). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

5.3 Adequacy and barriers to training

As referenced earlier, the ESS enables us to get a sense of employer perceptions of the adequacy of their investment in skills and training activity, and whether or not they recognise that they should do more. The survey reveals that 55% of creative industries employers were in training equilibrium – that is, meeting their training needs (see Figure 5.8). While this was broadly in line with the picture across the economy (57%), there are important nuances within this headline picture.

Figure 5.8: Adequacy of training in the creative industries vs all industries, 2022



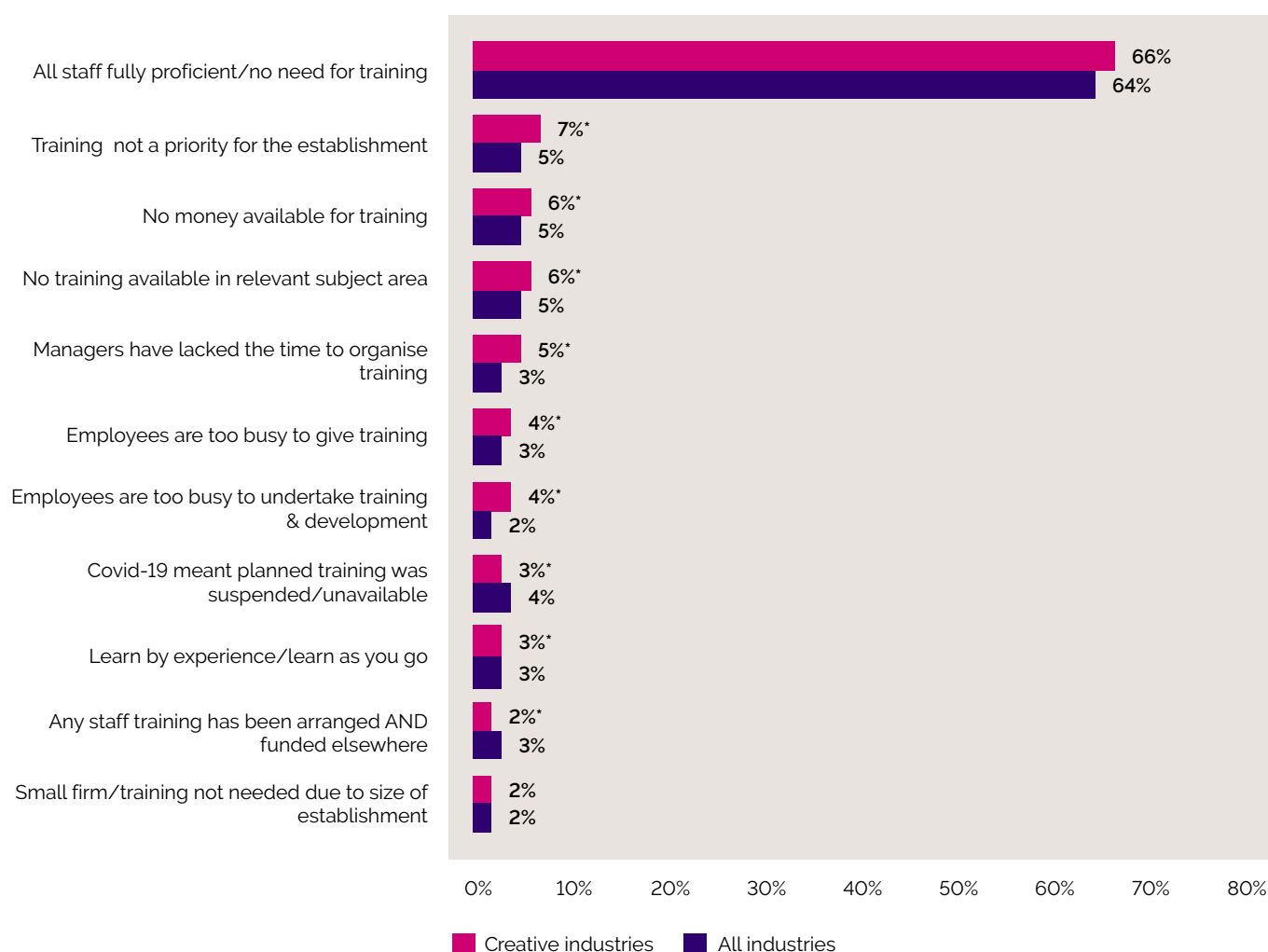
Source: Authors' elaboration based on Employer Skills Survey 2022 (DfE, 2023)

Notes: Employer base: for trainers, the base is all establishments providing training (n = 1,997); for non-trainers, the base is all establishments that did not provide training (n = 1,186). Figures may not sum to 100% due to rounding. *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

Firstly, 66% of creative industries employers that hadn't provided any training reported no need to do so – broadly in line with the average across all industries (64%) (see Figure 5.9). Although non-trainers did not form the majority of creative industries employers (45%, as we saw earlier), they did nevertheless make up a higher share of employers than in the economy as a whole. While these employers often suggested staff are fully proficient and some non-trainers did provide wider developments activities, this does raise questions about the extent to which some creative industries employers recognise the

need for ongoing learning to meet the evolving demands of a modern economy and to secure future success. Indeed, a slightly (but statistically significant) higher share of these employers suggested that training is not considered to be a priority of the business (7% of creative industries employers that hadn't provided training compared with 5% across the economy). They were also more likely point to practical barriers, such as lack of funding (6%), lack of relevant training (6%) and lack managerial time to organise training (5%).

Figure 5.9: Reasons for not providing training in the creative industries vs all industries, 2022



Source: Authors' elaboration based on Employer Skills Survey 2022 (DfE, 2023)

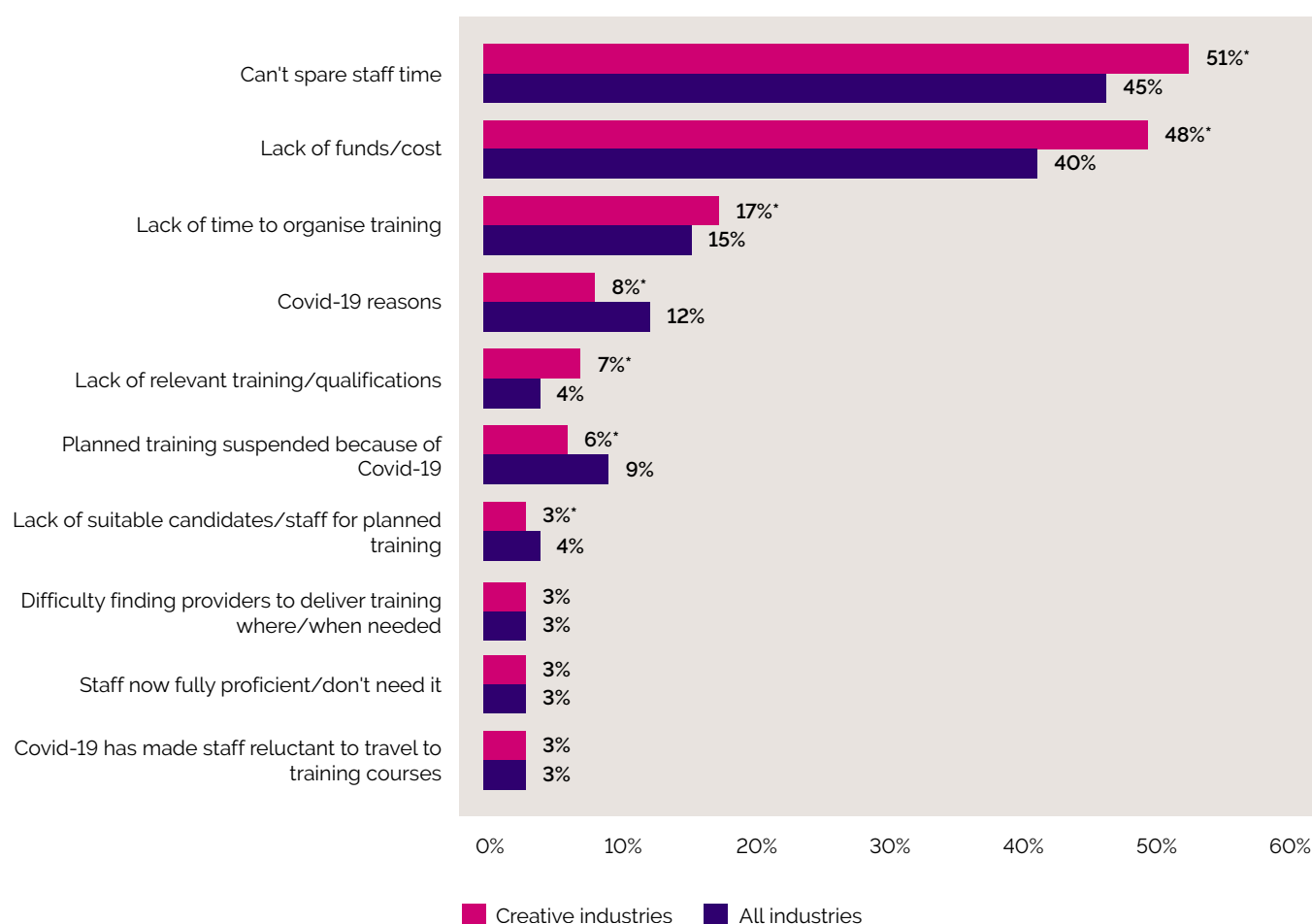
Note: Employer base: all establishments that did not provide training (n = 1,186). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

Secondly, a significantly higher share of creative industries employers that had provided training would have offered more training for staff if they could have: 53% compared with 47% across all industries. Encouragingly, then, while the approach to training among creative industries employers compared less favourably to the whole economy, there was recognition among employers that they want to do more and, hence, a growing skills ambition. These employers offer fertile ground for industry efforts to drive up skills investment, but they reported a range of barriers to doing so.

Creative industries employers that would have provided more training if they could were significantly more likely to report that they can't spare staff time for training (51% compared

with 45% across all industries) or lack funds to cover the cost of training (48% compared with 40%) (see Figure 5.10). This is a likely reflection of the dominance of micro-sized enterprises in the creative industries and the propensity for project-based work in some parts of the sector. A small but significantly higher share of employers in the creative industries also reported a lack of relevant training to be a barrier to them increasing current levels of training (7% of employers in the creative industries who were keen to provide more workforce training compared with 4% across all industries). When viewed alongside evidence of more limited provision of accredited training and engagement with further education colleges (see Section 5.2), this further emphasises the need to improve the industry relevance of skills provision.

Figure 5.10: Barriers to increasing skills investment in the creative industries vs all industries, 2022



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments that would have provided more training in the past 12 months if they could (n = 1,069).
*Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

5.4 People-orientated management practices

Finally, any assessment of the effectiveness of workforce development, training activity and the skills utilisation of staff, needs to be set in a wider organisational context. If the development of people is to positively drive ongoing business improvements, it cannot happen in isolation, but must be part of a broader management approach that values talent. This is essential to unlock the full potential of workers to enhance future business performance.

The ESS provides a measure of how businesses operate and organise their work to identify high-performance workplace (HPW) practices. HPW practices include organisational and management practices that are known to improve an organisation's capacity to effectively attract, select, hire, develop and retain high-performing personnel. The ESS 2022 recognises a set of 11 practices that give an indication of a more blended management approach. These range from having a business plan to providing employees with task discretion and autonomy. The survey has tracked the pattern of take up since 2011.⁹ In the latest survey, data was only collected for Wales, Scotland and Northern Ireland (not for England).

HPW practices work most effectively in combination as a 'bundle'. For companies to be recognised as HPW employers in the ESS, the threshold is that they adopt at least 7 out of the 11 practices.¹⁰ Crucially, this does not imply a universalistic, one-size-for-all approach, but is used as an indicator of HPW, looking for a balanced approach to management, which the evidence suggests is helpful in securing employee benefits and performance improvements (Giles, Carey, & Spilsbury, 2020).

In the creative industries, just 10% of employers adopted 7 or more HPW practices, broadly in line with the average across all industries (8%)

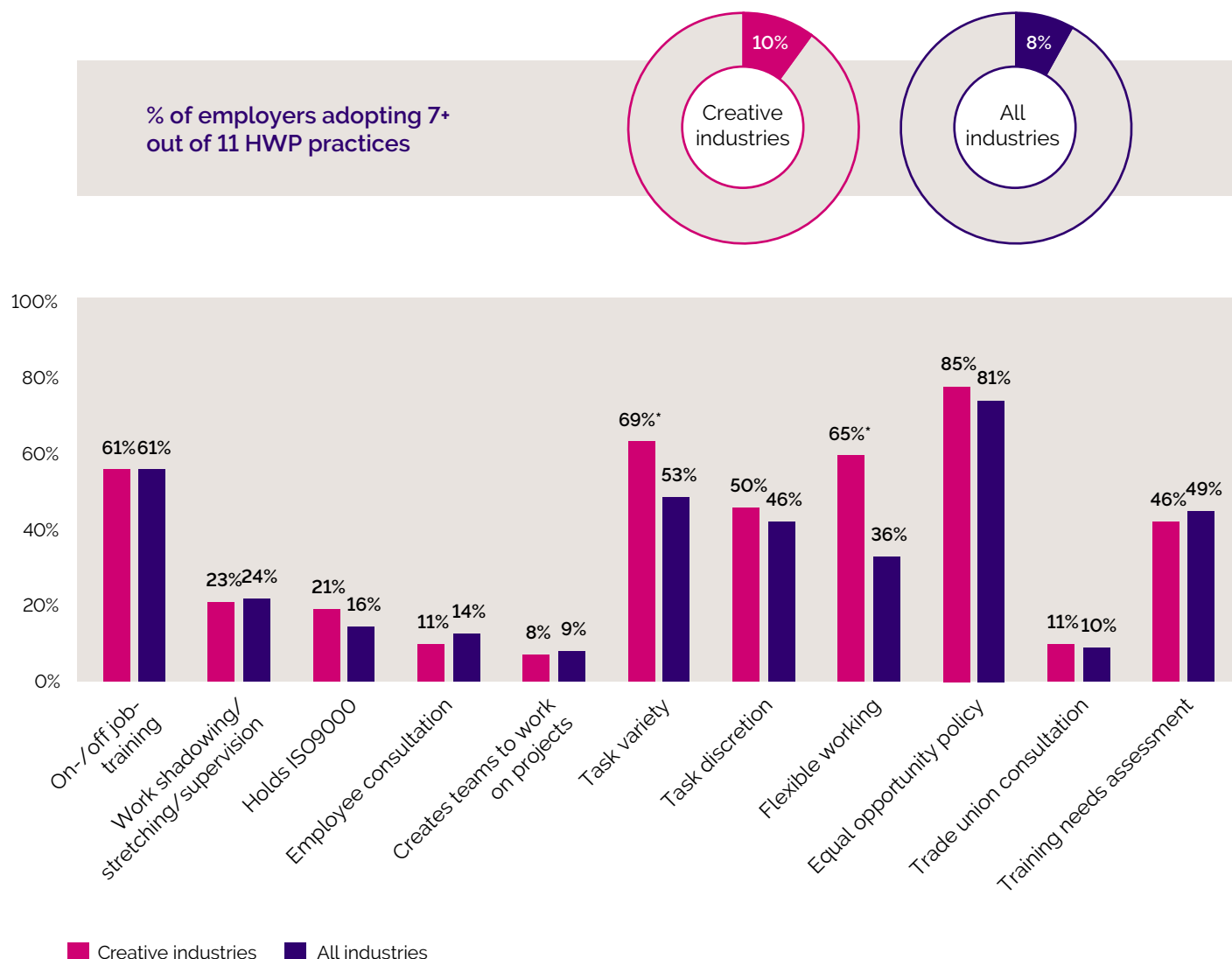
in the devolved nations (see Figure 5.11). But when we examine the picture of management practices in greater detail, we find some interesting points of difference.

On the one hand, echoing findings from the Creative PEC's Good Work Review (Carey, Giles, & O'Brien, 2023), employers in the creative industries were more likely to offer workers greater flexibility and greater autonomy (65% and 50%, respectively) than all employers (36% and 46%, respectively), and work was often more varied (69% compared with 53%). However, in contrast to the findings from the Review, the ESS 2022 data suggests that creative industries employers in the devolved nations are slightly more likely than average to have an equal opportunities policy in place and slightly less likely to adopt other practices that are important in building high-performing workplaces, including having mechanisms for consulting employees or assessing the training needs of their workforce, although differences are not statistically significant. Altogether this points to a need for further examination of the management practices of creative firms across the UK and how these might be strengthened to maximise the value of talent and build high-performing, productive and inclusive workplaces.

9. In previous years, a range of 21 practices were recognised, but this has since been reduced so comparisons between years are not consistent.

10. In previous years, it was 14 of 21 practices, so the threshold was higher.

Figure 5.11: High-performance workplace (HPW) practices in the creative industries vs all industries, 2022 (% of employers, devolved nations only)



Source: Authors' elaboration based on the Employer Skills Survey 2022 (DfE, 2023)

Note: Employer base: all establishments providing training (n = 1,997). *Asterisks are used to denote where data for the creative industries is statistically significantly different to other sectors of the economy.

6 Conclusions

6.1 Summary

Over the past decade, the creative industries have been expanding rapidly, growing at four times the rate of the wider UK economy. Between 2013 and 2023, employment in creative sectors increased from 1.7 million to 2.4 million, equivalent to 700,000 additional jobs. These jobs are well-paid and highly skilled.

This places considerable demand on the skills system, to ensure a ready supply of talent armed with the skills creative businesses need to compete, innovate and grow. There is onus too on creative businesses to invest in and effectively utilise the skills of their workforce to achieve higher levels of productivity and performance. And, as AI, wider technological advancement and other global 'megatrends' drive continual change in the knowledge, skills and competencies required in the workplace, both employers and workers need to invest sufficiently in upskilling and reskilling to ensure workforce skills remain relevant, now and in the future.

This report has sought to examine whether these conditions are being met. It utilises the DfE's Employer Skills Survey (ESS) – one of the most authoritative sources of labour market information (LMI) in the UK – to present new evidence on the picture and patterns of skills mismatches in the creative industries. We draw five key findings:

Firstly, skills shortages are a significant problem for creative businesses and are hampering innovation in the creative industries. There are

further risks of performance constraints in the future if skills issues are left unaddressed. While creative industries employers are less likely to experience recruitment difficulties, for those that do, a lack of skills among applicants is a much bigger challenge. Nearly two-thirds (65%) of hard-to-fill vacancies in the creative industries are attributable to skills shortages, compared with just 41% of hard-to-fill vacancies across all sectors. And creative industries employers are already much more likely to report having to delay developing new products or services as a consequence of the skills shortages they face.

Secondly, skills gaps among the existing creative workforce are also on the rise as the sector struggles to get to grips with rapid technological advancement and innovation. In 2022, nearly 60,000 creative industries workers were not fully proficient for their roles – equivalent to nearly 5% of the sector's workforce and an increase of 15,000 workers (or 1.5 percentage points) since 2017. Skills gaps caused by the introduction of new technology and the development of new products and services appear to be a particular challenge for creative businesses.

Thirdly, accessing advanced digital skills is a critical concern for creative industries employers, who also report a need for stronger job-specific, transversal and management skills. Creative businesses reporting skills deficiencies were more than twice as likely to suggest applicants or creative industries workers need to upgrade advanced or specialist IT skills, including for specialist software, hardware and internal systems; graphic design; multimedia production; data use; and web and app development. Specialist skills or knowledge needed to perform the job are also commonly reported as key, and employers also highlight a need to strengthen a range of transversal skills, including complex problem-solving, creative and innovative thinking and a range of management skills.

Fourthly, we find creative businesses are ambitious for the future, with technological advancement and innovation expected to create a need for new skills in the year ahead. Over two-thirds (69%) of employers in the creative industries said that they expect that their employees will need to upgrade their skills (compared with 62% of all employers), with the introduction of new technologies or equipment

and the development of new products and services more frequently the driver. The skills expected to need development in future are those in short supply today.

Finally, despite the substantive impact of skills deficiencies and the ambition of creative businesses, the research finds that creative industries employers are not investing sufficiently in upskilling their workforce. In 2022, 45% of creative industries employers had not provided any training in the year leading up to the survey – a higher share than that found across all industries (40%). Training is also of shorter duration, more likely to be on the job and less likely to lead to a formally recognised qualification. Furthermore, despite questions about the current adequacy of training, many creative businesses do not think that they need to do more, and this includes around two-thirds of the non-trainers. One of the overriding reasons for employers not training is that staff are said to be fully proficient. The research also points to a need for further examination of the management practices of creative firms and how these might be strengthened to maximise the value of talent and build high-performing, productive and inclusive workplaces.

6.2 Policy considerations

A number of policy messages emerge from the work. Principal among them is the importance of new and ongoing policy reforms to future-proof the skills system, improving industry relevance and responsiveness to rapidly changing demands across the future world of work. The creative industries are comprised of a knowledge-intensive, technologically enabled and innovative set of sub-sectors, and the research suggests that the skills system is failing to keep pace with the evolving skills needs of the sector.

With a new Industrial Strategy and stronger acknowledgement of the importance of sector recognition, end to end in the system, there is a need to strengthen the ways in which sectors can work in partnership to: review and articulate changing skills needs; co-design high-quality skills provision in response; and ensure skills programmes are effectively resourced and incentivised among employers and learners at sufficient scale. The research points to ways this might be achieved.

Firstly, robust LMI for the creative industries will be key, helping the skills system to better understand, anticipate and respond to employer needs. As Skills England develops a common LMI approach and coordinates data collection and analysis moving forward, this must look beyond standard sectors and take a detailed and nuanced approach to examining the needs of growth sectors, like the creative industries, on an ongoing basis. This must also connect with labour market assessments produced in some devolved nations to support a shared understanding of the skills priorities of the creative industries and its sub-sectors.

Secondly, with skills deficiencies in a range of areas, including specialist technical and vocational skills, transversal skills and, particularly, advanced digital skills, there is a need for stronger mechanisms for collaboration between education and industry.

Creative education and skills provision also needs to be more effectively coordinated across education pathways, from developing creativity, critical thinking and problem-solving in primary and secondary education to strengthening technical routes in further and higher education. As different nations

work to develop skills programmes that are more responsive to industry needs, there is the potential to create and grow recognisable, industry-endorsed training networks of more industry-facing providers that are formally accredited. Stronger links between industry and education will be crucial to achieving this in practice, to secure relevance and active participation among employers and learners. Yet the research suggests that employer engagement with the formal skills system, such as through colleges and universities, is currently limited. There is scope, therefore, to build on existing examples of strong partnership working between educators and employers in the creative industries, as well as drawing lessons from such practices in other sectors of the economy.

Finally, the research highlights the importance of stimulating greater employer investment in skills and strengthening the management practices of creative firms. A key challenge for the creative industries lies in the structural features of the industry, not least the dominance of micro-sized businesses, which face a range of practical barriers to training, including affording staff time off for training or a lack of funds to cover costs. It will be important to convince businesses that there is a need to invest in ongoing upskilling and reskilling to ensure workforce skills remain relevant and their business remains competitive. The widespread policy reforms taking place in each nation of the UK, and moves towards increased devolution, present opportunities to test a wide range of policy instruments for better leveraging firm investment and to

consider how existing national measures, such as the Growth and Skills Levy, can work more effectively for the sector and complement wider sector-orientated and place-based measures. Learning from international practices, there is also potential to further explore the value of enhancing collaborative working across the creative industries to more effectively pool resources and drive industry-relevant investment. In addition, policy reforms that

make skills provision more agile and flexible and consider the scope for more modular training as a basis to stimulate lifelong learning will also be important to raise levels of ongoing skills development. Finally, there is a need to further examine the management practices of creative firms and how these might be strengthened to maximise the value of talent and build high-performing, productive and inclusive workplaces.

6.3 Future research

The analysis presented throughout this report seeks to examine the picture of skills mismatches across the creative industries. However, as we know from wider work, there is considerable heterogeneity within the sector, and the picture of skills shortages and gaps will likely look very different for different creative sub-sectors. Further work is therefore needed to utilise 'top-down' sources of LMI to examine the skills needs and skills mismatches for different creative sub-sectors.

Further, as this research has shown, when examining skills shortages and gaps, often the most acute pinch points are associated with skills specific to the creative industries sector. This includes specialist skills or knowledge needed for creative roles and specialist software, hardware or systems. This emphasises the need to complement 'top-down' sources of LMI with 'bottom-up' research, working more closely with creative industries employers to provide more granular insight and offer greater specificity on occupations, job roles, skills needs and skills pinch points in different creative sub-sectors.

In addition, while the ESS is one of the most authoritative sources of LMI in the UK, the questions exploring skills shortages and skills gaps concern employees only. The omission of the self-employed is particularly important for the creative industries, given the share of the creative workforce that are self-employed is double the all-industry average (see Section 2.2). Hence, further research is needed to explore skills deficiencies among creative industries freelancers.

To address these gaps, the Creative PEC will be undertaking a more detailed skills audit process, supported by funding from DCMS and the Creative Industries Council. The Creative Industries Skills Audits will build on the platform of evidence provided in this report by conducting further analysis of secondary sources, a new Creative Employer Skills Survey and a series of roundtables with industry stakeholders. The research will be undertaken throughout 2025 and will provide more up-to-date and granular insight to inform skills policy and investment for creative sub-sectors.

However, further research will be needed. For instance, the spatial patterns of the creative industries coupled with the spatial footprint of education and training provision will mean that skills pinch points will likely vary considerably between nations, regions and localities. With the UK government committed to a programme of increased devolution, deepening and broadening deals at a regional level, there is a need for further research exploring the picture of skills needs and mismatches within different creative clusters across the UK.

Moreover, this LMI – across the creative industries, and compared with other sectors of the economy, looking sub-sectorally, occupationally and spatially – needs to be updated on an ongoing basis. The data presented in this report reflects a post-Covid-19 labour market, and as we have shown, labour demand and skills needs evolve rapidly in the creative sector. This creates a need for the ESS – as one of the UK's most authoritative sources, providing vital intelligence directly from employers – to be updated regularly and with sufficient sample size to enable granular analysis for sectors like the creative industries. There is also scope to explore the potential value of more 'real-time' data, albeit coupled with a need to consider the comprehensiveness and accuracy of these sources for sectors of

the economy – such as the creative industries – where informal recruitment channels are more commonly used and hence opportunities may not always be apparent as online job advertisements.

Finally, there is a need to build evidence more widely across the Labour Market Framework and to look in greater depth at key challenges surfaced through this research. This includes, for example, examining management practices in the creative industries and their link to firm performance; further exploring skills utilisation in the creative industries; and considering what financial instruments might more effectively incentivise and enable small and medium-sized enterprises investment in skills.

Annex

Definitions

Defining the creative industries

Throughout this report, we have used the Department for Culture, Media and Sport (DCMS) definition of the creative industries.

The industries are: Advertising and marketing; Architecture; Crafts; Design and designer fashion; Film, TV, video, radio and photography; IT, software and computer services; Publishing;

Museums, galleries and libraries; and Music, performing and visual arts.

Further details on the Standard Industrial Classification codes that make up the DCMS definition of the creative industries can be found [here](#).

Glossary

Drivers of change: An understanding of employment requirements should be grounded in an analysis of the forces of change that affect the current and recent performance of the organisations where jobs exist. A 'drivers of change' assessment considers the implications of any changes in employment conditions for jobs and employment and skills requirements. Most frequently, this involves a review of societal, technological, economic, ecological and political factors on labour market conditions. Where trends follow a clear, consistent and robust course over time and significantly impact on the jobs and skills landscape, these are termed megatrends. The most common megatrends capture the effects of globalisation and demographic, climate and technological change.

Education and skills provision: This captures the different parts of education and skills provision across the publicly funded system delivered in schools, further education colleges and universities, and by wider skills and training providers. It can also include provision by employers.

Employer training provision: This captures largely work-based training that is funded but also often delivered by employers. It usually consists of on-job and off-job activities and can be formal training, which results in some certification and/or attainment of qualifications, or informal training, involving activities such as coaching and mentoring.

Employment demand: This refers to employment and skills requirements in selected sectors, geographies and/or occupations. Employment and (in turn) skills demands are defined by the jobs that people do and the knowledge and skills needed to undertake them. The scale and nature of demand for skills is a 'derived' demand, depending on economic conditions, the structure of the economy, technology and business behaviour. Demand can reflect current work and/or future employment changes too. An analysis of demand is concerned with reviewing trends over time and supports the identification of the most pressing employment and skills requirements now and in the future.

Hard-to-fill vacancies: This is a measure of the extent to which employers experience difficulties when recruiting for vacancies.

High-performance workplace practices: These involve a blend of people-centred management practices, including both organisational factors (i.e. teamwork, autonomy, task discretion, mentoring, job rotation and applying new learning) and management practices (i.e. employee participation, incentive pay, training practices and flexibility in working hours). Taken together, these practices serve to effectively recruit, nurture, develop and deploy people in a way that provides the conditions for continuous improvement and higher productivity, through a highly engaged and empowered workforce.

Labour market framework: This is a commonly used consistent and robust basis to assess the most pressing employment and skills requirements across different parts of the creative industries and how these are changing over time. This ensures not only that assessments can draw on a wide range of data sources and evidence, including robust national statistics as well as more bespoke creative research, but also that the analysis and resulting conclusions are sufficiently balanced and consistently consider issues of employment demand, supply and mismatches.

Skills: This refers to the ability and capacity to carry out tasks using acquired knowledge, experience and capabilities to competently achieve the desired outcome. They mobilise knowledge, attitudes and values to meet complex demands. There are different types: basic skills are foundational skills necessary to function in life and at work, and these include numeracy, literacy and digital skills; technical skills are specialist skills, knowledge and expertise required to perform tasks and function within a particular job; and transversal skills are skills that cut across different tasks and job roles and can be used in a wide variety of situations in life and work, with examples including creative skills, critical thinking, social/emotional skills and practical skills.

Skills gaps: This is a measure of internal skills mismatch, being the extent to which employers think that the skills of their current workforce are suitable or deficient to the needs of their current role.

Skills mismatches: These occur where the volume and/or type of skills available (skills supply) are not well aligned with those required by employers (skills demand). These mismatches between skills and jobs will be exhibited in

the labour market in two main ways. First, they occur in the form of excess demand for some skills, as measured by skills deficiencies. These skills shortages and skills gaps mean that some employer needs are unmet, with skills levels being insufficient to meet the needs of the economy and labour market. Second, they arise in the form of excess supply of some skills where employers do not require them in sufficient numbers to fully employ all those who have them (demand deficiencies). This gives rise to unemployment, under-employment and skills under-utilisation among those whose skills are not required by employers under existing employment conditions.

Skills shortages: This is a measure of external skills deficiencies, being an indication of whether employers can find the skills, qualifications and experience that they need when trying to recruit to vacancies.

Skills supply: This refers to the skills that are available in society or in the workforce as a result of participation in, and attainment of, certified/non-certified skills development and training. In a context of a more dynamic and changing economy, the assessment of supply has increasingly moved towards a lifelong learning focus (including work-based development) that captures ongoing training throughout an individual's life as well as initial education for young people (in schools and in further and higher education).

Skills under-utilisation: This is a measure of internal skills mismatch where individuals have qualifications, capability and/or skills at a higher level than is needed for their current role. As such, there are skills that are under-utilised.

Structure of employment: This describes the characteristics of work in the creative industries sector, including the contract status of workers, working patterns, earnings, occupations, spatial patterns of employment opportunities, etc.

Training equilibrium: This is where employer training provision is sufficient for their need. This includes where employers have not provided training because none is needed and where employers feel that current levels of training are enough.

Unmet training needs: This occurs where employers feel current levels of workforce training are insufficient for their needs. This includes where employers did not provide training but would have liked to and where employers did provide training but would have liked to have provided more.

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Department for Culture, Media and Sport	<p>DCMS Sectors Economic Estimates: Gross Value Added for DCMS sectors and subsectors 2022 (provisional).</p> <p>This data is publicly available from the DCMS website, here.</p>
Department for Culture, Media and Sport	<p>Economic Estimates: Employment in the DCMS Sectors, January to December, 2011-2023.)</p> <p>This data is publicly available from the DCMS website, here.</p>
Department for Culture, Media and Sport	<p>Economic Estimates: Earnings in the DCMS Sectors, Annual Population Survey (APS), January 2023 to December 2023</p> <p>This data is publicly available from the DCMS website, here.</p>
Office for National Statistics	<p>Labour Force Survey 2023</p> <p>The detailed occupational data presented in this report is not publicly available. Wider labour market indicators for the creative industries are available from the DCMS Sectors Economic Estimates Series (see above).</p>
Department for Education	<p>Employer Skills Survey 2017</p> <p>The Employer Skills Survey 2017 data for the creative industries presented in this report is not publicly available.</p>
Department for Education	<p>Employer Skills Survey 2019</p> <p>Much of the Employer Skills Survey 2019 data for the creative industries presented in this report is not publicly available. A selection of indicators has been published by DCMS, available here.</p>
Department for Education	<p>Employer Skills Survey 2022</p> <p>Much of the Employer Skills Survey 2022 data for the creative industries presented in this report is not publicly available. A selection of indicators has been published by DCMS, available here.</p>

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