Labour Market Intelligence: Refresh – 2023

The Electrotechnical Skills Partnership

Snapshot report for South East

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1. Introduction

1.1 Background

The Electrotechnical Skills Partnership (TESP) commissioned Pye Tait Consulting, an independent research agency, to refresh labour market intelligence (LMI) that was undertaken in 2018/19 (with some additions in 2020 via a mini-LMI study) to understand the current skills requirements to work within the electrotechnical sector. The main report from 2018/19 provided a detailed overview of the electrotechnical sector, its workforce, skills needs, and the training and development typically undertaken.[1]

The electrotechnical sector continues to be at the forefront of a rapidly-evolving revolution in how we use technology – with increased demand for digital communication, energy conservation, electric vehicle charging, and renewable energy solutions with a particular focus on the electrification of heat (such as heat pumps) in buildings. The underlying driver for most of this development is the Net Zero agenda.

The overarching aim of this research is to update the previous LMI work to ensure accurate and up-to-date intelligence, building upon 2018/19 and 2020 research findings. The findings will provide TESP with renewed/up-to-date data that can be used to inform the development or update of a future labour force strategy.

1.2 Methodology

The study involved three core strands of research:

- desk research,
- a telephone survey of 467 employers, and
- follow-up interviews with 12 employers.

The survey questionnaire was designed to be similar to that used in 2018/19 and 2020 to enable longitudinal comparison.

1.3 About this report

The major output from this study is a UK-level report that outlines trends in the sector over the past few years. It provides a detailed insight into the state of the electrotechnical sector in terms of its workforce size, demography, and skills needs/challenges.

In addition, a series of twelve regional reports (one per English region and per devolved nation) will succinctly present the key findings from the research for TESP's regional managers to take forward in their work. This is the report for the South East.

[1] TESP, 2019, Labour market intelligence research

The findings contained in this report are derived from the telephone survey of employers. Of the 467 total respondents, 75 are based in the South East.

Findings are based on a small sample of businesses in the region, resulting in a larger margin of error than the main report, meaning findings should not be interpreted quantitatively as being necessarily representative of the region. From a qualitative standpoint the results will, however, be valuable indications of the local situation.

Note that charts and tables presented in this report may not sum to 100% due to rounding.

1.4 Respondent profile

Under two thirds (48, 64%) are micro firms employing fewer than 10 staff, just under a quarter are small firms (18, 24%) with 10 to 49 staff, almost a tenth (seven, 9%) are medium firms employing between 50 and 249 staff, and the remainder (two, 3%) are large firms employing over 250 people. The average (mean) size of company in terms of staff is 27, while the most common (modal) size is three staff. These figures include both PAYE direct staff and 'others' such as self-employed. Discounting the latter group, the average (mean) size is 23, and the most common (modal) size is also three.

The age spread of workers in the South East is very similar to the same as the UK as a whole – see Table 1.

Table 1 Age profile of respondents: UK and South East

Age	UK-wide	South East
16 to 18	6%	6%
19 to 24	14%	15%
25 to 49	50%	49%
50 to 64	26%	27%
65+	4%	3%

Base: 467 (UK) and 75 (South East) respondents. Source: Pye Tait Consulting 2023.

The workforce of surveyed respondents in the region is reported by respondents as being 98% UK citizens, with 1% being EU (non-Irish), and less than half a percent being Irish citizens – a similar profile to the UK as a whole.

Over seven in ten (72%) undertake new fit commercial work, and commercial repair and maintenance work. Around two fifths work in the domestic sector – new fit (43%) and repair (40%).

From a list of pre-defined activities, surveyed respondents most commonly undertake low voltage electrical installation (80%) or low voltage maintenance and repair work (79%). The next most common activities are emergency lighting systems (49%) and electrical design consultancy (48%).

1.5 Sector size

ONS SOC code data indicate there are 27,000 individuals (conf %: 6,800) working in the region in the SOC2020 code 5241: Electricians and electrical fitters.[2] However, it should be noted that ONS has identified an issue in the collection of occupation data affecting the accuracy of some detailed occupations and the data derived from the them, and urge caution in interpreting data. Nevertheless, based on an estimated proportion of those with electrotechnical skills who may operate at different skill levels, the overall total of electrotechnical-skilled workers in the region is 34,800 ± 6,800.

Further detail and considerations for how these figures are derived are outlined in the accompanying UK-wide report.

[2] Annual Population Survey, ONS, Jan to Dec 2022. Conf is presented as the standard error as a percentage of the figure.

2. Recruitment

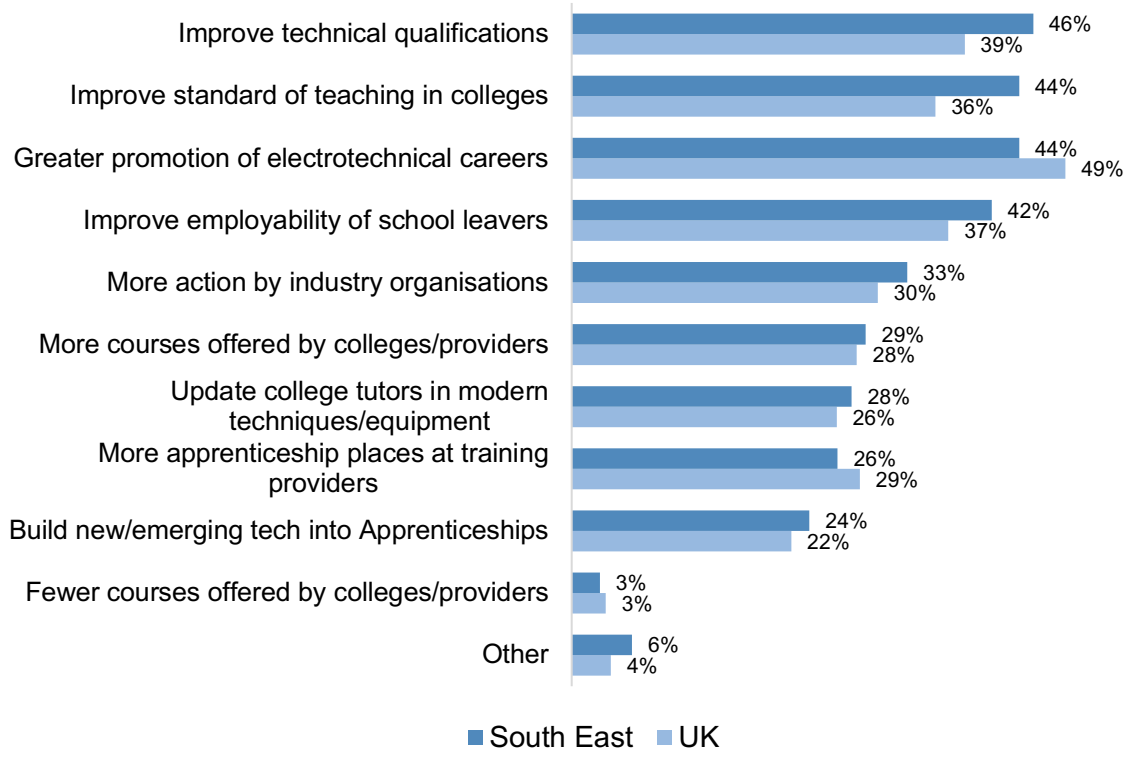
Surveyed employers most commonly report advertising to recruit skilled workers over the past 12 months (81 roles advertised), followed by apprentices/trainees (45) and project personnel (32). Of these, employers say two thirds (67%) skilled roles were hard to fill, as were one fifth (22%) of project personnel roles and apprentice/trainee roles (20%).

In terms of the employment basis, as compared to pre-COVID-19, over half of employers (53%) are 'more likely' to recruit using a PAYE directly employed approach and almost two in five to hire apprentices (38%), while around six in ten are neither more nor less likely to use an employment agency (64%) or to loan labour between companies (60%).

The main perceived actions required to tackle recruitment problems and skills shortages in the region include (see Figure 1):

- improving technical qualifications (mentioned by 46% vs 39% in UK as a whole),
- greater promotion of electrotechnical careers (44% vs 49%), and
- improving teaching standards in colleges (44% vs 30%).

Figure 1 Perceived actions required to tackle recruitment problems – UK vs South East



Base: 441 (UK) and 72 (South East) respondents (multiple responses permitted).
Source: Pye Tait Consulting 2023.

3. Skills needs of the electrotechnical sector

3.1 Electrotechnical qualifications

Respondents in the South East have a slightly less optimistic view of training and qualifications and preparedness of job applicants compared to the UK as a whole – see Table 2.

Table 2 Views on qualifications – agreement levels UK wide and South East

	UK-wide	South East
Job applicants typically have the skills we require of them to do the job well	58%	48%
Currently available qualifications fully reflect the demands of the job today	59%	55%
We are able to find suitable training in our area when we need it	69%	63%

Base variable: 460 to 462 (UK) and 75 (South East) respondents. Source: Pye Tait Consulting 2023.

3.2 Current and future skills needs

Employers were asked to comment on their business's current and future demand for a variety of technical skills. The results for the UK as a whole, and for the South East are presented in Table 3. It should be noted that, for the two sets of 'current demand' columns, three options were available to respondents ('not needed right now', 'needed and we have this skill', and 'needed but we don't' have in the business'), but that the 'not needed right now' responses are omitted for clarity.

A discussion of the findings is presented in the main UK-wide report.

Table 3 Current and future demand for technical skills – UK vs South East

Skill	Current demand – UK-wide		Current demand – South East		Needed in 3 years – UK-wide	Needed in 3 years – South East
	Needed and have skill	Needed but don't have skill	Needed and have skill	Needed but don't have skill		
Building Automatic Control Systems (BACS) design, installation & maintenance	16%	0.6%	18%	-	20%	23%
Direct electrical heating systems (e.g. storage heaters, UFH) design and installation	23%	0.6%	30%	-	38%	33%
Electric vehicle charging equipment (EVCE) installation	34%	2%	38%	-	39%	45%
Electrical - High Voltage	35%	2%	33%	3%	37%	30%
Electrical - Low Voltage	89%	1%	93%	3%	88%	93%
Electrical Design	67%	2%	68%	3%	69%	79%
Electrical Energy Storage Systems (EESS) design & installation	31%	2%	30%	-	39%	39%
Emergency lighting, installation & servicing	63%	0.5%	68%	-	64%	68%
Energy efficiency services including lighting and lamp replacement services, power factor correction etc.	45%	0.6%	50%	-	47%	62%
Fire detection and alarm system installation and servicing	51%	0.5%	52%	-	52%	60%
Heat pump installation and design	25%	2%	30%	-	31%	35%
Installation & maintenance of temporary and stand-by generator sets	28%	1%	32%	-	30%	37%
Installation of technologies associated with Smart-Buildings	20%	3%	16%	-	36%	20%
Installation, servicing & maintenance of security systems including intruder/controlled access and CCTV	46%	0.8%	47%	-	44%	45%

Lighting systems installation & maintenance including Highway and Street lighting	47%	0.6%	53%	-	49%	55%
Lightning protection systems design & installation	46%	0.9%	54%	-	50%	54%
Renewable energy systems design & installation	32%	6%	33%	-	44%	52%

Employers were asked a similar question in relation to their current and future demand for a variety of generic skills. The results for the UK as a whole, and for the South East are presented in Table 4. It should be noted that, for the two sets of 'current demand' columns, three options were available to respondents ('not needed right now', 'needed and we have this skill', and 'needed but we don't' have in the business'), but that the 'not needed right now' responses are omitted for clarity.

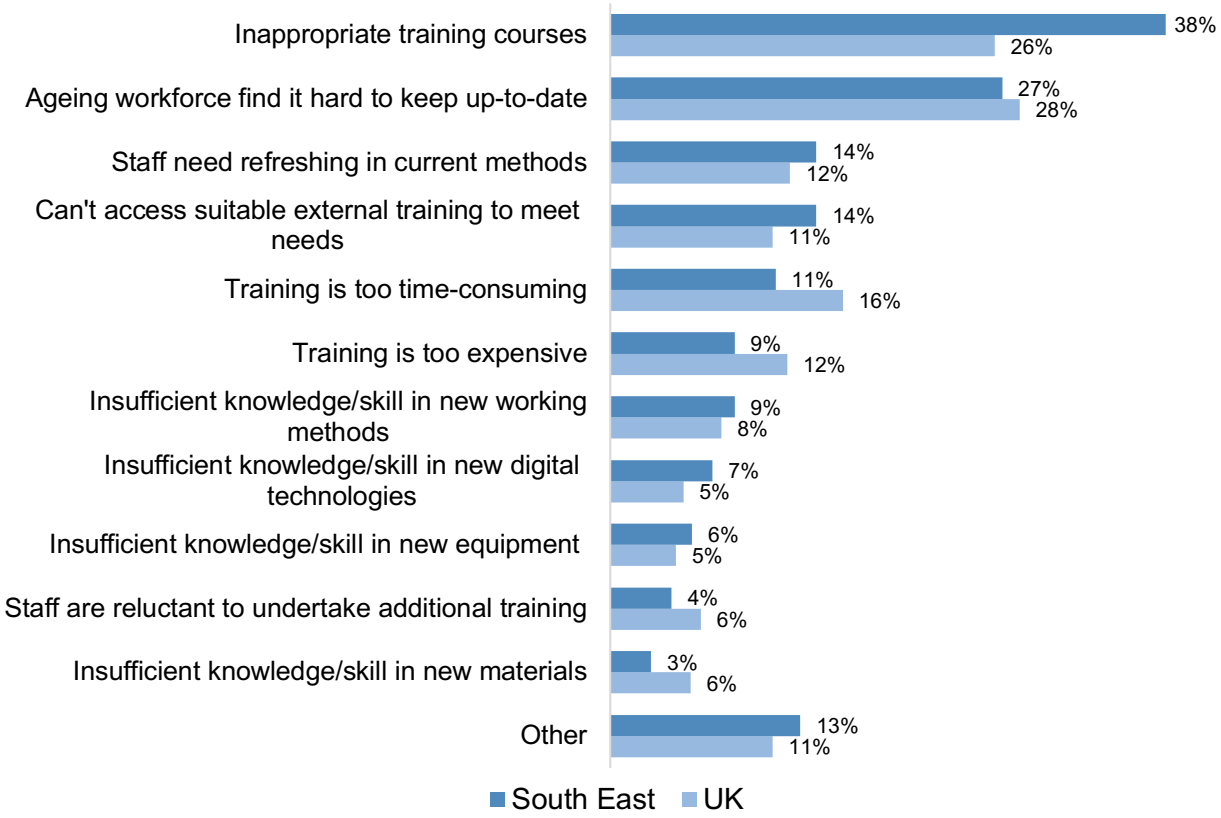
Table 4 Current and future demand for generic skills – UK vs South East

Skill	Current demand – UK-wide		Current demand – South East		Needed in 3 years – UK-wide	Needed in 3 years – South East
	Needed and have skill	Needed but don't have skill	Needed and have skill	Needed but don't have skill		
Management and leadership	97%	0.4%	100%	-	93%	89%
Maths	96%	-	94%	-	93%	87%
Problem solving	97%	0.4%	99%	-	94%	89%
Project and time management	95%	0.7%	96%	-	93%	88%
Spoken English	97%	-	95%	-	94%	89%
Team working and communication	98%	0.2%	97%	-	94%	88%
Written English	98%	-	97%	-	94%	89%
Client engagement	94%	2%	99%	-	93%	88%
Digital literacy (e.g. using the cloud / other platforms)	78%	7%	92%	2%	94%	87%

The main perceived reasons for skills deficiencies in the region include (see Figure 2):

- inappropriate training courses (mentioned by 38% vs 26% in UK as a whole), and
- ageing workforce experiencing difficulties in keeping up-to-date (27% vs 28%).

Figure 2 Perceived reasons for skills deficiencies



Base: 422 (UK) and 71 (South East) respondents (multiple responses permitted).
Source: Pye Tait Consulting 2023.

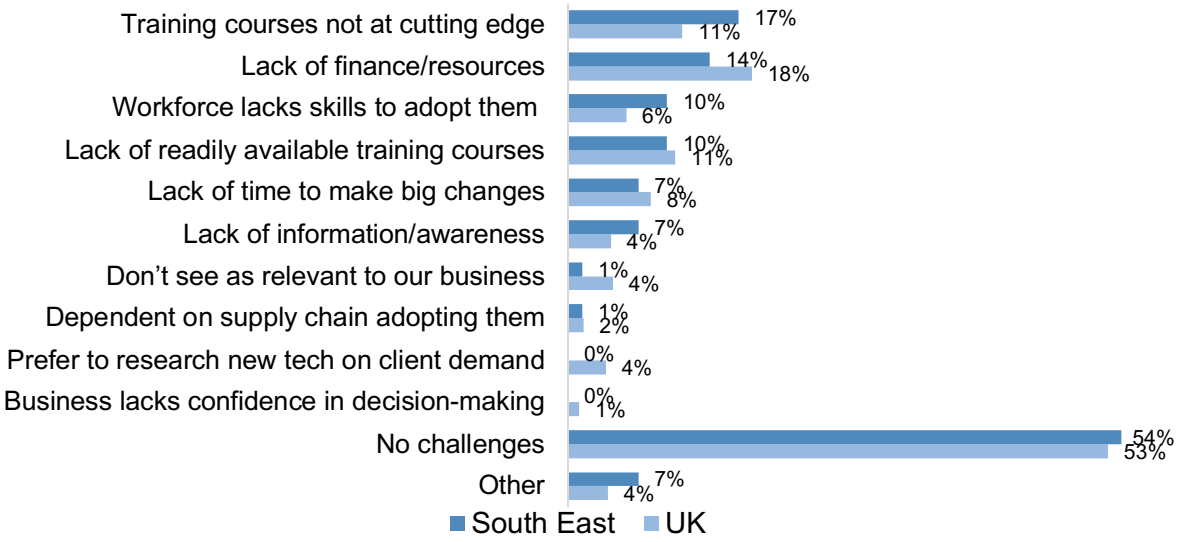
4. Future of the electrotechnical sector

4.1 Take-up of technology

The main perceived issues that organisations in the region face in adopting new technologies and processes include (see Figure 3):

- training courses are not at the cutting edge of industry needs (mentioned by 17% vs 11% in UK as a whole), and
- a lack of finance/resources (14% vs 18%).

Figure 3 Perceived challenges in adopting new technologies - UK vs South East



Base: 456 (UK) and 72 (South East) respondents (multiple responses permitted).
Source: Pye Tait Consulting 2023.

There appears to be a slightly higher level of concern in the South East compared to the wider UK that sector-wide take-up of new technology and processes is relatively modest (42% agree or strongly agree, vs 40% in UK) – Table 5.

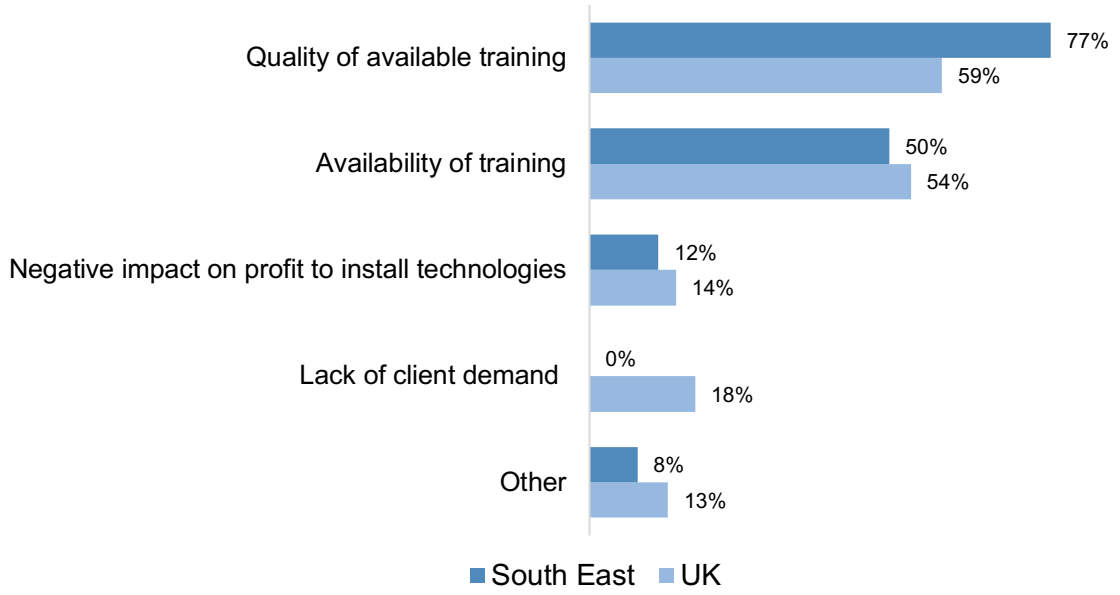
Table 5 Sector-wide take-up of new technology is relatively modest – UK vs South East

	UK-wide	South East
Strongly agree	9%	6%
Agree	31%	36%
Disagree	60%	58%
Strongly disagree	0.5%	-

Base: 399 (UK) and 66 (South East) respondents. Source: Pye Tait Consulting 2023.

Those agreeing or strongly agreeing were asked why they believe take-up has been relatively modest. Reasons generally reflect those of the wider UK, although there is a more common perception of quality of available training being a leading reason (77% vs 59% of UK) – Figure 4.

Figure 4 Perceived reasons for modest take-up of technology – UK vs South East



Base: 153 (UK) and 26 (South East) respondents (multiple responses permitted).
Source: Pye Tait Consulting 2023.

4.2 Workforce projection

Companies anticipate that, in five years' time, they will employ a slightly lower average of staff – 30 staff (compared to 27 now). This includes both PAYE direct staff and 'others' such as self-employed. Discounting the latter group, the future average (mean) size is anticipated to be 27 (compared to 23 now), indicating an expansion in company size anticipated in the future for the region.

Compared to the UK as a whole, anticipated demand for personnel in the region in the next two to three years is higher for project supporting roles and fire and security system installers, and lower for qualified electricians, apprentices, and electrical labourers – see Table 6. While most surveyed employers believe demand will remain steady, a greater proportion believe demand will increase than decrease over the coming years for all roles.

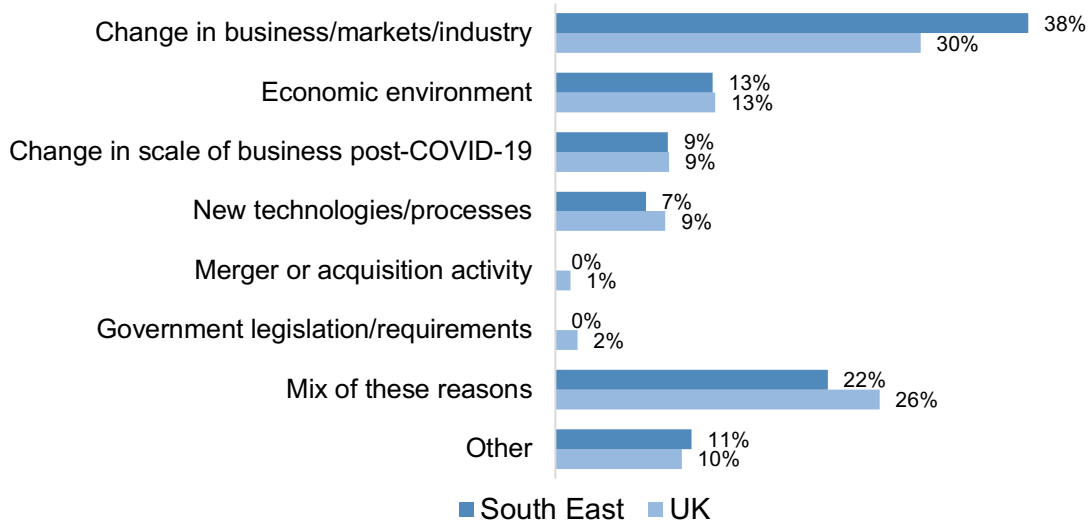
Table 6 Anticipated demand for personnel change – UK vs South East

		Decrease	Remain the same	Increase
Managers and supervisors	UK-wide	4%	88%	8%
	South East	7%	85%	8%
Design engineers and estimators	UK-wide	5%	81%	14%
	South East	10%	75%	15%
Qualified electricians	UK-wide	5%	41%	54%
	South East	11%	39%	50%
Apprentices	UK-wide	6%	45%	49%
	South East	13%	41%	46%
Project supporting roles	UK-wide	5%	82%	13%
	South East	9%	72%	19%
Fire and security system installers	UK-wide	7%	82%	11%
	South East	11%	75%	14%
Electrical labourers	UK-wide	5%	64%	31%
	South East	9%	64%	27%

Base variable: 390 to 452 (UK) and 64 to 72 (South East) respondents. Source: Pye Tait Consulting 2023.

Respondents foreseeing an increase or decrease in demand for any role were asked for the main reason for this change. Responses generally reflect those provided at a UK-wide level, with more belief that the main reason for change in demand is change in business/markets/industry (38% vs 30% in the UK as a whole) – see Figure 5.

Figure 5 Main reason for change in demand – UK vs South East



Base: 325 (UK) and 55 (South East) respondents. Source: Pye Tait Consulting 2023.

Compared to the UK as a whole, anticipated demand for personnel in the region in the next three years as a direct result of new technologies and processes is higher for supervisors and project personnel, but lower for skilled workers (e.g. qualified electricians) and unskilled workers – see Table 7.

Table 7 Anticipated demand for job roles as a direct result of new technologies – UK vs South East

		Decrease	Remain the same	Increase
Directors and managers	UK-wide	5%	89%	7%
	South East	10%	81%	9%
Supervisors	UK-wide	5%	83%	12%
	South East	10%	74%	16%
Project personnel	UK-wide	5%	76%	19%
	South East	12%	65%	23%
Skilled e.g. qualified electricians	UK-wide	6%	41%	53%
	South East	13%	41%	46%
Unskilled e.g. labourer	UK-wide	6%	60%	33%
	South East	13%	61%	27%
Apprentices/trainees	UK-wide	8%	44%	47%
	South East	13%	43%	43%

Base variable: 396 to 442 (UK) and 33 to 35 (South East) respondents. Source: Pye Tait Consulting 2023.