



Digital Tech & Creative

Dorset Local Skills Improvement Plan

LMI Sector Insights | December 2023







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www.dorsetchamber.co.uk/lsip

Data notes

- This sector dashboard uses a combination of data published via the Office of National Statistics (ONS) and also utilises vacancy data via <u>Lightcast</u>
- Lightcast is a global leader in labour market analytics. This dashboard primarily uses Lightcast job posting analytics and focuses on the Dorset LSIP area and trends over time
- It is important to note that the analysis here only reflects jobs that are posted online. It effectively 'scrapes' a range of job websites, alongside candidate profiles
- Lightcast uses sophisticated software to try remove duplicates i.e. jobs posted repeatedly, but recognises that this may remain an issue for some postings
- Because it captures online job postings only, it cannot capture informal job vacancies and recruitment. It is important to recognise that in some sectors such as construction recruitment tends to be more 'informal' and will not be reflected in the data here. This may also be more prevalent in small and micro businesses
- It is also important to note that the analysis attempts to differentiate between sectors and 'occupational pathways'. That is, some of the requirements for certain skills do not necessarily occur in tightly defined sectors. For example, digital skills are important across a whole range of sectors, whilst many people working in construction do not necessarily work in the construction sector per. This utilises the Lightcast Occupation Taxonomy see later slide around definition
- Given there will be some short-term volatility in job posting data, the analysis here covers the period Jan 2022 to Sept 2023. This will serve to 'smooth' some of the data and for the use Dorset LSIP analysis – longer-term trends are important
- Christchurch is defined within Lightcast as being in the Dorset Council area this classification does not reflect the post-April 2019 Local Government restructure

Definitions (1)

Standard Industrial Classification (SIC) based approach – slides 4 and 5

2620 : Manufacture of computers and peripheral equipment
6110 : Wired telecommunications activities
6120 : Wireless telecommunications activities
6130 : Satellite telecommunications activities
6190 : Other telecommunications activities
6311 : Data processing, hosting and related activities
6312 : Web portals
9511 : Repair of computers and peripheral equipment
9001 : Performing arts
9002 : Support activities to performing arts
9003 : Artistic creation
9004 : Operation of arts facilities
9101 : Library and archive activities
9102 : Museum activities
9103 : Operation of historical sites and buildings and similar visitor attractions
7410 : Specialised design activities
7420 : Photographic activities
7430 : Translation and interpretation activities
7311 : Advertising agencies
7312 : Media representation
7111 : Architectural activities
7021 : Public relations and communication activities
5811 : Book publishing
5812 : Publishing of directories and mailing lists
5813 : Publishing of newspapers
5814 : Publishing of journals and periodicals
5819 : Other publishing activities
5821 : Publishing of computer games
5829 : Other software publishing
5911 : Motion picture, video and television programme production activities
5912 : Motion picture, video and television programme post-production activities
5913 : Motion picture, video and television programme distribution activities
5914 : Motion picture projection activities
5920 : Sound recording and music publishing activities
3299 : Other manufacturing n.e.c.
6201 : Computer programming activities
6202 : Computer consultancy activities
6203 : Computer facilities management activities
6209 : Other information technology and computer service activities
6010 : Radio broadcasting
6020 : Television programming and broadcasting activities
8552 : Cultural education

Working Futures analysis – slide 6

61: Telecommunications
62: Computer programming
63: Information services
90: Creative, arts and entertainment

Lightcast occupational taxonomy – slides 10 to 14

Programmers and Software Development Professionals
IT Managers
IT Business Analysts, Architects and Systems Designers
Information Technology Professionals n.e.c.
IT User Support Technicians
Graphic and Multimedia Designers
Information Technology Directors
IT Operations Technicians
Telecoms and Related Network Installers and Repairers
IT Project Managers
Arts Officers, Producers and Directors
Public Relations Professionals
Computer System and Equipment Installers and Servicers
Advertising Accounts Managers and Creative Directors
Photographers, Audio-visual and Broadcasting Equipment Operators
Database Administrators and Web Content Technicians
Library Clerks and Assistants
Precision Instrument Makers and Repairers
Design Occupations n.e.c.
Electrical and Electronics Technicians
Clothing, Fashion and Accessories Designers
Furniture Makers and Other Craft Woodworkers
Bakers and Flour Confectioners
Other Skilled Trades n.e.c.
IT Quality and Testing Professionals
Authors, Writers and Translators
Cyber Security Professionals
Florists
Web Design Professionals
Textile Process Operatives
Printers
Actors, Entertainers and Presenters
Librarians
Newspaper and Periodical Broadcast Journalists and Reporters
Textiles, Garments and Related Trades n.e.c.
IT Network Professionals
Archivists, Conservators and Curators
Tailors and Dressmakers
Musicians
Artists
Newspaper, Periodical and Broadcast Editors
Upholsterers
Print Finishing and Binding Workers
Glass and Ceramics Makers, Decorators and Finishers
Dancers and Choreographers

Digital and creative – overview (1)





The digital and creative industry (which in the definition used encapsulates a range of activities) is dominated by micro businesses. Employment has been sustained at a relatively constant level over the past few years, the fall in the numbers employed shown above was undoubtedly a consequence of the impact of the pandemic (the data encapsulates both employees and proprietors) when many in the sector i.e. freelancers were hit hard.

Source: ONS (Business Register and Employment Survey and UK Business Counts)

* All figures are rounded to avoid disclosure. Values may be rounded down to zero and so all zeros are not necessarily true zeros

Digital and creative – overview (2)







The ICT (proxy for digital) and the creative arts, entertainment and cultural sector is significantly larger in BCP than in Dorset County – as measured by output (top left chart). The creative arts sector has experienced steady growth over the past 10-15 years across both BCP and Dorset County (bottom left chart).

The ICT sector – which includes publishing, film, TV production as well as telecoms and information technology has been an important contributor to overall economic growth across the Dorset LSIP area. The data (above right chart) indicates that the arts, entertainment and recreation sector played a less significant role in terms of contribution to overall economic growth across the Dorset LSIP area – undoubtedly partly reflecting that much of the sector was shutdown during 2020 and 2021.

Source: ONS (Sub-regional (Balanced) Gross Value Added)

Digital and Creative – future projections



8,000 7,000 5,000 1,000 -1

The latest Labour Market and Skills projections produced through the Working Futures programme - covering the period 2020-2035 and the first produced in a post-Covid environment – projects that overall employment in digital and creative will increase over the 10-15 years. The data presented here is at a national (England) level.

The projections expect employment to increase in digital and creative industries over the next 10-15 years, with particular strong increases in professional occupations – which already covers most of the employment in this sector now. The projections suggest a further focusing of employment in that sector.

The projections are intended to provide a statistical foundation for reflection and debate among all those with an interest in the demand for and supply of skills. They are produced because historical evidence shows that changing patterns of employment by sector and occupation tend to largely dominated by longer-term trends rather than the cyclical position of the economy or short-term impacts. However, it is obvious that these projections are subject to high degrees of uncertainty and therefore we would urge careful interpretation of these projections. They are intended as a starting point for further analysis rather than a projection of what is most likely to happen. They represent one possible future.

Source: Working Futures 2020-2035

Digital and creative – key research findings



- > The UK ranks 41st in the world for digital competitiveness rankings for employee training
- Digital skills are now essential entry requirements for two-thirds of UK occupations and these occupations account for 82% of online job vacancies. In the manufacturing sector for example, 87% of employers say that basic digital skills are important for their workers.
- Employers say that only 48% of people leaving full-time education have the advanced digital skills required, and many companies cite lack of available talent as the single biggest constraining factor to their growth, 30% of skill-shortage vacancies involve a lack of basic digital skills
- Covid had a positive impact in terms of increasing the number of people who hold basic digital skills estimated to be c6mn fewer working adults having zero workplace digital skills. Digital skills in workforce have improved and deepened
- However, there remains the 'hidden middle' approx. one-third of workforce still lacking essential digital skills for work. Particularly marked in those aged 55+, those working part-time, those in service sector and those with no formal qualifications

Digital and creative – key research findings

- Also appears to be a gender issue with women not having made the same digital gains (post Covid) as makes although this also reflects working practices, family commitments, industry of employment etc.
- Digital skills of young people have improved markedly necessity potentially behind big improvements for youngest workers, as they start their working lives and were thrown into the very different working environments due to the pandemic
- > People working at small or microbusinesses are least likely to have essential workplace digital skills
- Range of different motivations for people to digitally upskill and it is these motivations that tend to drive behaviour rather than the availability of skills training provision. As such digital training should anchor onto outcomes, end goals and 'hook' workers with what they will be able to do instead of promoting digital skills as an end result – acting as the incentive for involvement
- Jobs in the broader digital tech economy now account for around 14% of the UK workforce at 4.7mn people
 More than 2mn tech vacancies were advertised over the last 12 months

Source: Miscellaneous – House of Commons Science and Technology Committee, World Digital Competitiveness Ranking 2023, Department of Digital, Culture Media and Sport, WorldSkillsUK, Employers Skills Survey 2019, 2023 Global Skills Report

Digital and Creative (SSA2) Autumn 23 update Data covering 2022 – 2023 (to date)

Digital and creative job postings – associated occupations

21,099 Jobs (2022) 17% below National average	%	+1.8% Change (2022-202 Nation: +1.4%	23)	£ £ Me Nation: £	19.26/hr 35.8k/yr dian Wages 220.62/hr; £39.1k/yr
Occupation	2022 Jobs	Annual Openings	Median Wages	Growth (2022 - 2023)	Employment Concentration (2022
Programmers and Software Development Professionals	3,498	210	£21.73/hr	+2.06%	0.83
IT Managers	1,882	100	£21.68/hr	+1.65%	0.76
IT Business Analysts, Architects and Systems Designers	1,644	69	£29.36/hr	+0.67%	0.89
Information Technology Professionals n.e.c.	1,219	59	£21.14/hr	+0.74%	0.8:
IT User Support Technicians	1,101	47	£15.25/hr	+0.09%	0.8
Graphic and Multimedia Designers	928	73	£11.59/hr	+3.45%	1.1
Information Technology Directors	807	36	£37.56/hr	0.00%	0.68
IT Operations Technicians	667	28	£13.14/hr	+0.90%	0.7
Telecoms and Related Network Installers and Repairers	650	31	£15.41/hr	+2.15%	0.96
IT Project Managers	565	28	£27.40/hr	+0.71%	0.7
Arts Officers, Producers and Directors	505	43	£19.37/hr	+4.75%	0.6
Public Relations Professionals	450	28	£16.91/hr	+2.67%	0.7
Computer System and Equipment Installers and Servicers	398	11	£16.15/hr	-0.25%	0.84
Advertising Accounts Managers and Creative Directors	385	26	£21.70/hr	+3.12%	0.9
Photographers, Audio-visual and Broadcasting Equipment Operators	382	21	£13.64/hr	+2.09%	0.8
Database Administrators and Web Content Technicians	344	15	£15.76/hr	+0.87%	0.6
Library Clerks and Assistants	329	13	£11.06/hr	-0.61%	1.3
Precision Instrument Makers and Repairers	312	13	£12.75/hr	+1.92%	1.4
Design Occupations n.e.c.	310	20	£14.61/hr	+3.55%	0.9
Electrical and Electronics Technicians	300	14	£17.62/hr	+1.67%	1.1

An alternative method of estimating the scale of digital and creative jobs across the Dorset LSIP area is to understand what types of jobs/occupations tend to be filled by those individuals who undertook related training (at SSA 2 level). In effect this represents the 'occupational pathways' (as described in the data notes slide). This analysis is available via Lightcast (utilised for this analysis) which have developed the Lightcast Occupation Taxonomy which aims to link skills acquisition to occupations. Based on this methodological approach, it is estimated that there were c21,100 jobs in 2022 across the Dorset LSIP area in occupations associated with digital and creative courses (SSA2). The number of jobs in associated occupations has increased by 1.8% between 2022 and 2023 across the Dorset LSIP area.

One of the explanations of the difference between the two job figures shown in this slide pack (slide 4 versus slide 11) is that digital and creative occupations can be found across a myriad of sectors (in all likelihood the whole economy). The two cannot be directly compared.

Source: Lightcast, 2023

Digital and creative job postings - volume



There were 30,303 total job postings for your selection from January 2022 to November 2023, of which 15,313 were unique. These numbers give us a Posting Intensity of 2-to-1, meaning that for every 2 postings there is 1 unique job posting.

This is close to the Posting Intensity for all other occupations and companies in the region (3-to-1), indicating that they are putting average effort toward hiring for this position.

Top Five Industries by Total Jobs that Employ the Target Occupations at 2-Digit SIC

Industry	Occupation Group Jobs in Industry (2022)	% of Occupation Group in Industry (2022)	% of Total Jobs in Industry (2022)
Computer Programming, Consultancy and Related Activities	3,683	17.5%	69.9%
Retail Trade, Except of Motor Vehicles and Motorcycles	1,089	5.2%	3.0%
Financial Service Activities, Except Insurance and Pension Funding	1,083	5.1%	13.9%
Telecommunications	1,064	5.0%	42.3%
Other Professional, Scientific and Technical Activities	813	3.9%	29.2%

There c15,000 job postings across 2022 and 2023 (to date) relating to the occupations associated with digital and creative courses (SSA2).

Typically, jobs are posted twice before being filled (posting intensity of 2:1), and this has remained broadly stable over time.

Digital and creative job postings – location and recruiters

Top Cities Posting

City	Total/Unique (Jan 2022 - Nov 2023)	Posting Intensity	Median Posting Duration
Bournemouth, Bournemouth and Poole	12,106 / 6,303	2:1	30 days
Poole, Bournemouth and Poole	8,289 / 3,818	2:1	31 days
Christchurch, Dorset CC	1,870 / 979	2:1	29 days
Dorchester, Dorset CC	1,971 / 940	2:1	31 days
Weymouth, Dorset CC	1,589 / 745	2:1	29 days
Wimborne, Dorset CC	1,071 / 549	2:1	30 days
Blandford Forum, Dorset CC	649 / 349	2:1	28 days
Ferndown, Dorset CC	573 / 299	2:1	32 days
Portland, Dorset CC	405 / 272	1:1	35 days
St Ives, Dorset CC	280 / 146	2:1	28 days

* Christchurch is defined within Lightcast as being in the Dorset Council area – this classification does not reflect the post-April 2019 Local Government restructure

One of the aspects to note is that - in terms of top recruiters – this includes recruitment/employment agencies, indicating that some recruitment goes via third parties. The other aspect to note is that some of the largest recruiters are organisations that would not be defined as necessarily digital and/or creative i.e. JP Morgan Chase, NHS, Vitality etc. This mostly reflects digital recruitment.

Top Companies Posting

Company	Total/Unique (Jan 2022 - Nov 2023)	Posting Intensity	Median Posting Duration
Hays	1,728 / 640	3:1	25 days
JPMorgan Chase	927 / 528	2:1	34 days
Spectrum It Recruitment	1,545 / 472	3:1	29 days
NHS	1,173 / 449	3:1	32 days
Nigel Frank	700 / 435	2:1	34 days
Bond Williams	635 / 308	2:1	24 days
Ultra Agency	592 / 306	2:1	48 days
Rubicon Recruitment	560 / 273	2:1	28 days
Leo Recruitment Limited	220 / 186	1:1	33 days
Vitality Corporation Bv	602 / 158	4:1	35 days
Morson International	317 / 147	2:1	32 days
Rise Technical Recruitment Ltd	315 / 131	2:1	33 days
BAE Systems	239 / 122	2:1	21 days
The Talent Locker	227 / 122	2:1	24 days
Bournemouth University	172 / 121	1:1	30 days
Matchtech	199 / 110	2:1	34 days
Connect It Recruitment Ltd	143 / 104	1:1	33 days
Dorset Council	116 / 96	1:1	27 days
Jigsaw Specialist Recruitment	124 / 79	2:1	33 days
JAM Recruitment	137 / 68	2:1	36 days

Source: Lightcast, 2023

Digital and creative job postings – role demand

Top Posted Job Titles

Job Title	Total/Uni	que (Jan 2022 - Nov 2023)	Posting Intensity	Median Posting Duration
Software Engineers		986 / 484	2:1	30 days
Systems Engineers		514 / 250	2:1	29 days
IT Support Engineers		341 / 205	2 : 1	31 days
.NET Developers		493 / 197	3 : 1	32 days
Software Developers		354 / 186	2 : 1	33 days
Line Support Engineers		271 / 156	2:1	27 days
Infrastructure Engineers		270 / 145	2:1	25 days
DevOps Engineers		169 / 96	2:1	34 days
Full Stack Developers		172 / 91	2 : 1	30 days
CNC Mill Operators		210 / 84	3:1	33 days
IT Support Technicians		129 / 84	2:1	23 days
Network Engineers		149 / 79	2:1	33 days
Embedded Software Engineer	5	126 / 74	2 : 1	32 days
Front End Developers		119 / 71	2 : 1	30 days
Graphic Designers		104 / 69	2:1	29 days
C# Developers		136 / 68	2 : 1	32 days
Java Developers		121 / 64	2 : 1	30 days
Data Engineers		98 / 62	2:1	30 days
Service Desk Analysts		150 / 62	2:1	27 days
Graduate Engineers		111 / 61	2:1	28 days

The most common job postings within the associated occupations are software engineers, software developers, systems engineers etc. Again, this data is using a taxonomy that charts the roles/jobs that tend to be filled by individuals that undertook digital and/or creative related courses (SSA2 level).

Typically, jobs are posted twice before being filled (posting intensity of 2:1), and this has remained broadly stable over time.

It is important to note that this slide details the job vacancy postings i.e. dynamic demand. This compares to some earlier slides (e.g. slide 9) which illustrated the level of job roles across the Dorset LSIP area.

Digital and creative job postings – skills (1)

Top Common Skills	
Skill	Postings with Skill
Communications	3,902
Management	2,116
Problem Solving	1,489
Customer Service	1,438
Detail Oriented	1,383
Planning	1,096
Troubleshooting (Problem Solving)	980
Operations	804
Leadership	786
Innovation	774
Sales	767
Self-Motivation	739
Mentorship	561
Writing	547
Organizational Skills	533
English Language	523
Teamwork	522
Time Management	510
Microsoft Office	497
Research	465

Skill		Postings with Skill
Agile Methodology		1,511
Software Engineering		1,277
avaScript (Programming Language)		1,208
QL (Programming Language)		1,191
# (Programming Language)		1,137
roject Management		1,118
/icrosoft Azure		1,041
oftware Development		913
ava (Programming Language)		842
crum (Software Development)		774
oplication Programming Interface (API)		759
nux		754
ystems Engineering		749
ython (Programming Language)		693
echnical Support		660
ascading Style Sheets (CSS)		642
utomation		636
Amazon Web Services		622
2++ (Programming Language)		621
active Directory		582

The most sought after specialised skills predominantly relate to those required in the digital and ICT field. These include software engineering, specific programming and software development such as JavaScript, Azure etc.

In terms of common (soft) skills, communication and management skills tend to highly sought after.

Source: Lightcast, 2023

Digital and creative job postings – skills (2)

Skill Rank	Top 10 List of Skills Needed for the Job(s)	Local Area occupied with the Job(s)	Skill Rank	Top 10 List of Skills Needed for the Job(s)	Top 10 List of Skills Added by Members in Local Area occupied with the Job(s)
1	Active Directory	Windows Server	1	Software Development	C#
2	Windows Server	Active Directory	2	JavaScript	Software Development
3	Technical Support	Technical Support	3	Git	JavaScript
4	Windows 7	Troubleshooting	4	C#	SQL
5	Windows 10	Servers	5	Java	Git
6	Troubleshooting	Project Management	6	SQL	Java
7	Microsoft Exchange	Management	7	React.is	NET Framework
8	VMware	Microsoft Exchange	8	Agile Methodologies	Cascading Style Sheets (CSS)
9	Servers	Networking	9	NET Framework	HTML
10	Network Administration	Agile Methodologies	10	Node.is	React.is
					ć
Skill Rank	Top 10 List of Skills Needed for the Job(s)	Top 10 List of Skills Added by Members in Local Area occupied with the Job(s)	Inforn	nation Technology	
1	Editing	Editing	Softw	are engineer	
2	Video Production	Adobe Photoshop	Media	and Communications	
3	Video Editing	Social Media	Wiedie		
4	Adobe Premiere Pro	Copywriting			
5	Copywriting	Video Editing			
6	Web Content Writing	Video Production			
7	Film Production	SEO Copywriting			
8	SEO Copywriting	Web Content Writing			
9	Blogging	Adobe Premiere Pro			
10	Film	Writing			