

South Yorkshire Employer Insights on Artificial Intelligence and Jobs of the Future Provider Response

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Artificial Intelligence Provider Response

Advances in AI continue to drive innovation across the board. The technology permeates many forms of business activity in South Yorkshire and as many as 70% of employers believe that it represents a valuable opportunity for growth. Providers and employers have been working together to identify the sector's strengths, skills gaps, and future priorities. This report reflects those conversations and aims to inform the next Local Skills Improvement Plan (LSIP).

Current Skills

What are we doing now?

Employers' experiences and engagement with AI vary significantly, ranging from adopting AI products and services to achieve efficiencies to AI playing a more fundamental role. Some are creating AI bespoke products and infrastructure, such as building large language models, developing customised pipelines, and creating automated platforms.

While there are more specific technical AI skills (software development, programming, machine learning and the use of large language models) required by those at the forefront of AI development, the more routine use of AI simply requires an understanding of how to use the tools. This requires adaptability, problem solving and curiosity with digital skills- best advanced through real-world application. As such there are few wholly AI roles advertised in the sub-region, instead employers are focused on upskilling their existing employees and embedding AI roles into job descriptions. This, however, is made difficult by the rapid pace at which new AI models and technologies emerge, and employers wish to see education systems adapt and shift towards teaching AI more routinely within curricula.

Employers were confident that future generations would enter industry with an understanding of AI and a willingness to work with it but were concerned that AI generated CVs were making recruiting harder to identify quality candidates. Additionally, traditional interview techniques may not be suitable for candidates to demonstrate their technical capabilities for roles with an AI component.

What more could policy makers and providers do?

Businesses are keen to upskill their existing employees to meet current skills gaps through a top-down approach. However middle management roles were mentioned by employers as continually difficult roles to fill and there still exists a need to continue work on digital skills more broadly across the region to meet the skills divide.

The desire from employers for adaptability and problem solving (advanced through real-world application) is particularly well suited to courses with on-the-job training such as apprenticeships. The development of these apprenticeships, however, depends heavily on closer collaboration between providers and businesses to design courses that meet business need.

Providers highlighted that there is (at present) limited availability for ASF funded AI courses. The leveraging of funding opportunities and further flexibility from SYMCA may ensure a more agile and responsive approach from providers than that offered by the traditional funding bid method. There is also an opportunity to develop a South Yorkshire-based solution in the creation of an AI compliance badge for employers.

Training Provision

What are we doing now?

Keeping pace with AI is an ongoing journey and there is real enthusiasm from employers about the possibilities associated with its use. There is an openness to engaging with training provision as long as the content is practical, sector and role specific and able to fit around a working day. Those more engrained in the use of AI see themselves as contributors as much as learners and want spaces to share their insights whilst deepening their own capabilities.

However, there is also a clear sense of how fast things are moving and how hard it can be to decide where to focus. The availability and visibility of AI support across South Yorkshire varies widely, awareness is low and it is fragmented and difficult to navigate. While there are pockets of expertise, many depend heavily on internal knowledge, self-directed learning, and personal networks rather than on established, clearly signposted support systems.

What more could policy makers and providers do?

A recent SYMCA survey report and insights from the employers engaged in this research highlighted that CEOs are driving the AI agenda rather than digital transformation teams who may have broader AI understanding. As such, for providers and brokers, the opportunity was identified in discussions as lying in being visible in those early stages, offering guidance that is both sector-specific and product-agnostic, while presenting services in ways that are easy to understand, access, and implement. This, it was agreed, may be best facilitated through a two-step process:

1. Understanding what businesses need to ensure provision is tailored i.e. their issues and challenges associated with growth (given the application of AI will vary between sector and company size)
2. Supporting SMEs by breaking down AI to basic core components i.e. what it is, how it can be best utilised to improve productivity and demystify the technology and avoid misunderstandings.

Following this, more specific provision can be divided into relevant skills courses and employers directed to the most applicable and relevant institution. Providers acknowledged that it is important these courses are framed around specific, practical outcomes that teams can act on straight away. Additionally ensuring tailored online tools and resources are provided to complement and reinforce live sessions.

By understanding the scale of potential change providers can get ahead in driving digital transformation and help businesses understand how AI can drive productivity (i.e. through Case Studies). There is a need for providers and partners to take less of a regulatory view and centre discussions on growth and productivity, moving away from more transactional to strategic relationships.

Future Outlook

What are we doing now?

Looking to the future, a lack of knowledge was identified as the primary barrier for employers when it comes to AI adoption alongside older workforces, employer scepticism, market uncertainty, lack of confidence in returns, and gaps in specialist support.

Despite increasing deployment, the adoption of AI policies to regulate its use is not widespread, they were often subsumed into wider digital and data policies. That said many were looking to adopt a formal policy. In larger firms its use was more likely to be covered by company procedures and/or AI working groups or forums.

What more could policy makers and providers do?

The importance of internal policies, frameworks and guidance was highlighted, and for those working with LLMs or agentic AI, compliance with regulatory frameworks to ensure the use and development of AI is safe and unbiased. Providers identified an opportunity to support through the convening of engagement events to facilitate peer-to-peer networking and address this challenge whilst stimulating the growing AI ecosystem. These events could also meet employer requests for training providers to increase the frequency of consultation with industry bodies, developing a deeper understanding of how to tailor training content to meet their needs.

Financial support for businesses looking to adopt AI would also be welcomed by employers. The consideration from policymakers to support subsidised training grants, assistance with purchase agreements, and links to provider and creator deals would make the adoption of AI more financially viable. For those who have embedded AI, support to pay licensing fees would be appreciated and pooling of AI resources and/or infrastructure to enable new entrants to keep pace with some faster developing firms.

The provision of work experience and ‘real life’ experiences was a priority for inspiring the next generation, offering insights into industry and the use of technology in business. The concept of role models was frequently mentioned in the context of technology adoption and the value of meaningful work encounters for primary as well as secondary students. Employers had a range of strong partnerships with education providers, some of which were AI specific such as STEM ambassador programmes and AI roundtables, it is important to maintain these as the ecosystem develops. There is also some interest in engaging with young people with special educational needs and disabilities through outreach activities which could be an area that providers can support.

Additional opportunities for training, building on the services of those already provided AI to businesses in the sub region, would help to consolidate the benefits of AI adoption, providing tangible, industry specific outcomes for those looking to use AI more frequently. The sub-region is well-placed to harness to potential of AI, highlighting the importance of raising awareness of uses, providing meaningful opportunities for training, and supporting smaller businesses to keep pace with technological advances.



Accelerating digital transformation

