



# BSI's Consulting: Helping Skills Development Scotland meet the challenges of Industry 4.0

## The story at a glance

- The world of work is changing. The fourth industrial revolution will bring new challenges and opportunities, and businesses will need employees ready for the future
- The right skills matter more than ever. Skills Development Scotland (SDS) is investing further in the Scottish skills system to ensure it is efficient, inclusive and future-focused
- By strengthening the standards and frameworks that underpin the Scottish skills system, Skills Development Scotland will ensure the needs of learners and employers are met and help to drive a prosperous and resilient future for Scotland.

## The starting-point

The fourth industrial revolution is coming. Hardware, software and biology technologies will combine into new cyber-physical systems. Advances in communication and connectivity will lead to breakthroughs in areas like robotics, artificial intelligence, nanotechnology, quantum computing, the internet of things, 3D printing and fully autonomous vehicles.

The rate of change will be very fast. Old tasks will be automated but new tasks, new jobs and even new industries will appear.

Employers will need to encourage the acquisition of new skills at a rapid pace, using a high-quality approach.

At the national level, growth can only be inclusive if there are opportunities for all citizens. They will need to be able to make informed choices about their learning and careers, with effective learning pathways into productive employment.

“By supporting SDS’ continuous improvement efforts through a standards-centric approach, we will build on the strengths of Scotland’s growing apprenticeship system. Together, we can deliver the right knowledge, skills and capabilities to fuel a thriving Scottish economy.”

**Scott Steedman**, Director of Standards at BSI

If countries are to rise to the challenge of the fourth industrial revolution during a pandemic recession and recovery, they need an increasingly productive and resilient workforce. Therefore, it is important that people can carry skills and competencies from one job to another.

### The challenge

Skills Development Scotland (SDS) is the national skills body supporting the people and businesses of Scotland to develop and apply their skills. Their vision is to create a high-performing, internationally respected apprenticeship system equipping businesses and citizens with the right knowledge, skills and capabilities to create a prosperous and growing Scottish workforce.

SDS sought to build on the already strong Scottish apprenticeship system by investing in continuous improvement. In a time of such turbulent change, their challenge is to address how Scotland’s skills system can evolve to meet the future needs of employers and learners, in an adaptable, sustainable and resilient way.

### Skills Development Scotland’s strategy

SDS recognise that standards and frameworks are essential for high-quality apprenticeships. Their vision is brought to life with three specific objectives.

- 1 To create standards and frameworks which underpin the delivery of an apprenticeship family fit for the demands of Industry 4.0. For this to succeed, standards and frameworks need to be specified in a consistent way that is user-centred, flexible and high quality.
- 2 To ensure the relevance of standards and frameworks for the future through deeper and wider engagement with employers and learners. This means appealing to a fully representative population of employers and learners, and involving them in the development, design and quality assurance stages.
- 3 To design a flexible, responsive apprenticeship system that delivers value for money. This requires creating a streamlined system that can be managed sustainably.



## BSI's contribution

BSI are experts in sharing knowledge, innovation, and best practice to help people and organizations make the most of their resources. SDS and BSI understand that standards play an important role in promoting productivity, increasing quality, reducing costs and driving economic growth.

BSI has deep-expertise in creating and running standards programmes and SDS depends upon the central role of standards in ensuring quality. They commissioned BSI to review their governance, standards, processes, and change programmes, helping to ensure that Scottish Apprenticeships can remain world-class.

BSI provided a detailed report that has helped SDS assess their processes, procedures, services, and respond better to challenges. BSI drew out the best recommendations to strengthen competence and capabilities within the already strong skills system. Using a hybrid-approach, BSI combined

traditional and new innovative approaches using agile methodologies which created flexible and adaptable solutions, that added real value to SDS through results-focused efforts. This has strengthened a number of key areas, expanding the future learnings that embody SDS' philosophies, goals and ambitions.

Scott Steedman, Director of Standards at BSI, said "Standards are at the heart of the world's most successful skills systems. Our partnership with SDS is underpinned by a shared belief that future economic growth relies on a skilled workforce that is productive, resilient and adaptive in the face of a rapidly changing economy. By supporting SDS' continuous improvement efforts through a standards-centric approach, we will build on the strengths of Scotland's growing apprenticeship system. Together, we can deliver the right knowledge, skills and capabilities to fuel a thriving Scottish economy."

“We are delighted to have partnered with BSI to have undertaken the review of Scotland’s employer-led apprenticeship development process. BSI have taken an innovative approach, bringing together elements from their existing standards and utilising a range of expertise from within their organization.”

**Jonathan Clark**, Service Design and Innovation Director at SDS

## The results

SDS is building on the well-established and respected Scottish apprenticeship system. BSI is proud to be playing a supporting role which ensures that this system is optimized for the future. This joint piece of work will help to unlock innovation opportunities and will future-proof an already robust system that will be more responsive in the face of rapid change.

BSI found that SDS’ approach to apprenticeship development results in many benefits to Scotland’s economy, employers and learners. It provides:

- An effective response to delivering the skills that employees and businesses need in a changing world of work
- A better fit between work-based learning, the jobs that employees do and the skills that employers need in the workplace
- An increase in employer’s engagement with the Scottish Apprenticeship System

SDS is at the beginning of an exciting journey to enhance the Scottish skills system. This work supports the goal of developing a high-performing and internationally recognized apprenticeship system, by

engaging employers in the heart of the apprenticeship development process.

The recommendations provided by BSI will enable SDS to further strengthen the Scottish apprenticeship system, ensuring high levels of participation across the skills landscape. Collaborations with employers and system stakeholders will be vital in continuing the development and delivery of high-quality apprenticeships.

Jonathan Clark, Service Design and Innovation Director at SDS, said “We are delighted to have partnered with BSI to have undertaken the review of Scotland’s employer-led apprenticeship development process. BSI have taken an innovative approach, bringing together elements from their existing standards and utilising a range of expertise from within their organisation.

The report confirms the Scottish Apprenticeship system is fit for purpose and responsive to an ever-changing external environment. It also provides clear and actionable recommendations that we will use to further enhance Scottish Apprenticeships.”

# Why BSI?

For over 100 years, our services and solutions have been helping organizations around the world to improve performance, build competence and support sustainable growth. Our mission is to share knowledge, innovation and best practice to help people and organizations make excellence a habit.

## Our aim

We combine our analytic and consulting rigour, so that your organization can benefit from our deep expertise, cross-sector knowledge and an unmatched network of global contacts.

**To learn more about how BSI's consulting team can help you create excellence for your organization and industry**

<https://www.bsigroup.com/en-GB/our-services/standards-services/standards-consulting/>

or get in touch with us to discuss your requirements.



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