



## **SCOTTISH GOVERNMENT**

Written consultation response (submitted by e-mail)

# **RENEWING SCOTLAND'S FULL POTENTIAL IN A DIGITAL WORLD: UPDATING THE DIGITAL STRATEGY FOR SCOTLAND**

The Scottish Council for Development and Industry (SCDI) is an independent and inclusive economic development network representing all sectors and all geographies of the Scottish economy. Our mission is to convene our members and partners across the private, public and third sectors to collaborate to deliver inclusive and sustainable economic growth.

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# Renewing Scotland's full potential in a digital world: updating the digital strategy for Scotland

## Collaboration

This discussion document has been co-produced with COSLA. We wish to build on this collaborative and partnership approach to digital with other organisations and sectors across Scotland to maximise the impact of the strategy. Thinking about this:

### 1. Do you think there are opportunities to realise this collaborative approach?

#### Yes

We very much welcome the ambition set out in the digital strategy to seize the opportunity to make Scotland a truly digital nation and the emphasis on the role that all of us - private, public and third sector can play in that. However, there must be a deadline set for achieving the strategy and for achieving the roll-out of superfast broadband within that.

The vision for a Digital Scotland is not achievable *without* collaboration due to the scale and breadth of change required to fully realise the opportunity digital presents.

We welcome the key aspects of the strategy bulleted on page 5. However, we would welcome a clear statement of the overall vision for the strategy which ties together the strands along with a timeline for delivery of the strategy. This would make clear our level of ambition. The approach taken by the Estonian government (<https://e-estonia.com/>) is a good model for this.

We are aware that there are already many existing or emerging initiatives and stakeholders operating in the digital space. A useful early action would be to map the digital landscape and purpose of different initiatives (or indeed publish an update of this if it has already been created). This may highlight areas of overlap or indeed potential cross sector or functional collaboration and innovation. We should look to invest in what we have already before creating new initiatives.

Much as with clean growth, 'digital' cuts across many industries, public and third sector activities. Understanding and aligning the various digital initiatives will be key to impactful delivery as will clear messaging to stakeholders of how it all fits together.

Messaging in general needs to be clear so that every stakeholder understands what we mean by 'digital' and why it is important to them in terms of the impact on their lives or organisations. The Covid-19 pandemic has shown that public trust government and related institutions is not uniform. A stronger statement that the strategy will seek ways to rebuild that trust is welcome.

We would welcome confirmation in the strategy that digital ambition is about data as well as the application of technology and would welcome a more explicit recognition that data held in the private sector can play a role as important as that held in the public sector.

It would also be useful to set out some principles for delivery of the strategy which should hold irrespective of whether aspects are being delivered by public, private or third sector stakeholders and irrespective of the area of activity. These might include e.g. trust, transparency, customer-centricity, pace, and inclusion.

Notwithstanding the fact that there may be sub-strategies or action plans we would welcome an overarching action plan that sets out timelines for the strategy as a whole and any sub-strategies. This needs to set out the timescale for delivery of the digital strategy, who is responsible for delivery, funding or other resources required and target outcomes aligned to national performance measures.

A governance group which meets regularly should be convened to oversee the strategy. This should be small and focussed with representation from key stakeholders and experts. To lead this, we support the proposal of a Chief Digital or Chief Digital Strategy officer for Scotland.

A high-level dashboard of key KPIs supported by sub-area KPIs should be updated and reported on regularly. This could be supported by an annual event which showcases progress and good practice.

In addition, it would be useful to recalibrate the starting point at the outset. The Scottish Government has been measuring the use and application of digital technologies in Scottish businesses through its Digital Economy Maturity Index. These were based on surveys in 2014 and 2017 and published in the subsequent years. SCDI is unsure whether a survey has been possible this year. The Index should be updated as soon as possible to measure the digital transformation during 2020 and respond accordingly.

## **2 Of the opportunities which you have identified, which do you think are the priority ones?**

1. A clear high level vision statement of ambition and timeline will give focus to the strategy and allow other plans to be aligned.
2. This must be supported by measurable KPIs, a governance body and timely and transparent reporting to give the strategy the best chance of impact.
3. The strategy should be ambitious in stating the pace of change we want to achieve and commit to deadlines for doing so.
4. A strong, consistent, and pro-active communications strategy should be developed to support and enable the overall success of the strategy.

## Vision

We are particularly interested in your responses to the narrative and actions set out in Sections 4 'No one left behind' to Sections 9 'An Ethical Digital Nation':

### 3. Is the vision that we have set out in the supporting narrative in each of these sections the right one?

	Yes	No
No One Left Behind	<input checked="" type="radio"/>	<input type="radio"/>
Services Working for All	<input type="radio"/>	<input checked="" type="radio"/>
Transforming Government	<input checked="" type="radio"/>	<input type="radio"/>
A Digital and Data Economy	<input type="radio"/>	<input checked="" type="radio"/>
A Vibrant Tech Sector	<input type="radio"/>	<input checked="" type="radio"/>
An Ethical Digital Nation	<input type="radio"/>	<input checked="" type="radio"/>

If you have ticked 'no' or you think we could improve the vision, please explain why:

#### Services working for all

- We welcome the principles of inclusive service design and convenience. However, we would also welcome a stronger focus on redesigning services to deliver outcomes in the fewest possible steps and length of time. This may be what is implied by 'convenience' but a stronger statement of what this means is helpful.
- Data that can help the delivery of public services does not solely sit within public service data silos. We would welcome a principle around data that seeks to use or combine robust private data from trusted organisations and public data to provide the best possible customer insight, service design and operational delivery.
- It is not explicitly referenced but we would welcome a reference to infrastructure and the potential to use digital tools and data to deliver better

and net zero infrastructure. For example, there is huge potential to embed digital healthcare support in housing, in integrating room sensors in buildings to manage air quality and energy use, of building information modelling in to support the efficient design, delivery and maintenance of new infrastructure and in the predictive maintenance of built assets to reduce the cost and energy to manage them.

- SCDI welcome the proposal to create Research Data Scotland and the desire to attract academic and commercial partners to work with the new organisation. Combining anonymised data sources to get a rich picture of citizens is something the private sector has been doing for decades to deliver digital services from on-line shopping to banking. We would encourage the strategy to consider how working collaboratively with some of these providers could accelerate insight into policy issues and how it could help to operationalise policy responses developed from the insight by ensuring the right target citizen is addressed with the right message, through the right medium.

### **Digital and Data Economy**

- We would welcome the reference to micro-businesses as well as SMEs in terms of access to support as these can be excluded on occasion from core digital programmes and many are the SMEs of the future.
- As a principle the strategy should be looking to upscale existing programmes and sweating existing assets whether through colleges and universities or other organisations, before introducing new initiatives.
- The lack of focus on e-commerce is an omission. The biggest challenge many businesses in Scotland have faced during the pandemic has been to move trading online and many are still struggling with this.
- There has been a longstanding challenge of encouraging more women and girls into the computing sector with challenges still to overcome around the image of the sector. SCDI would welcome a stronger statement about redoubling our collective efforts to address gender diversity in the digital and data sectors. According to a report referenced by the [Royal Society](#) there has also been a drop of around 25% since 2005 in the number of computing science teachers. Skilled IT professionals could transition to these roles with the correct pathways.
- There is not enough focus on the role of colleges (as well as universities) in delivering data/digital education and training and their role in feeding the university digital and IT degree programmes.
- We welcome the focus on understanding how home and remote working can be made better by technology. However, we are also seeing that some organisations are reversing their earlier decisions to move entirely to remote working due to low productivity and staff satisfaction. We would encourage the strategy to consider the latest evidence on this and to consider the role of hybrid remote working models as part of any research undertaken.

## **A Vibrant Tech Sector**

- The strategy should consider how the opportunity for growing demand for 'green tech' could be capitalised in Scotland to create jobs and economic opportunity. The climate emergency is driving investment and entrepreneurship in green technologies both to deliver the energy sources of the future but also in the application of the Internet of Things, Artificial Intelligence and Virtual Reality to a range of net zero challenges right across society and industry.

## **An Ethical Digital Nation**

- We welcome the vision and principles set out to ensure an ethical approach to the development and use of data and digital approaches. At the heart of any interactions with citizens should be the principles of privacy and choice about what is shared, with whom and for what purposes. We should be looking to build a nation of data savvy citizens who are informed and able to make choices about their data.
- To enable this, we need to ensure that citizens are comfortable with sharing their data. Cyber security and data protection solutions around any online data collation and use is paramount and this needs to be made clearer and stronger within the strategy across all areas of activity. Citizens need to be confident that their data is treated carefully and only stored and used appropriately. This brings risk so ensuring the security of data is inbuilt in from the start is critical to build trust.
- The Scottish Government's Fair Work action plan should address how Scotland will learn from the way other countries are developing their ethical guidelines for AI technologies and access to collective data in the workplace and develop its own policies that fit within Scotland's Fair Work framework.

**4. Do you think that the potential actions set out in each section will deliver the vision set out in the supporting narrative?**

	Yes	No
No One Left Behind	<input type="radio"/>	<input checked="" type="radio"/>
Services Working for All	<input type="radio"/>	<input checked="" type="radio"/>
Transforming Government	<input type="radio"/>	<input checked="" type="radio"/>
A Digital and Data Economy	<input type="radio"/>	<input checked="" type="radio"/>
A Vibrant Tech Sector	<input type="radio"/>	<input checked="" type="radio"/>
An Ethical Digital Nation	<input checked="" type="radio"/>	<input type="radio"/>

If you have ticked 'no' or think we could improve any of the actions, please explain why:

**No-one left behind**

- We welcome the commitment to inclusive superfast broadband, but the strategy must commit to a deadline for doing this at pace to be meaningful. Without this many of the other actions will fail to be achieved. For some parts of Scotland, for example, the South of Scotland, this connectivity is *the* key first step to unlocking the economic potential of the region, to enabling local businesses to grow, to retaining talent, to enabling investment in renewable energy infrastructure, to supporting learning provision and to addressing issues of social care provision.
- Scotland should explore the potential for AI technologies, such as chatbots, and open data to support easy to understand information and advice about and increased participation in employment, fair work and skills development opportunities and funding.

**Services working for all**

- We would welcome a commitment to develop a technology roadmap and adoption strategy for the emerging and future technologies which will support service delivery whether blockchain, virtual reality or others.



- SCDI's Policy Committee recently met with members of the Independent Review of Adult Social Care. They recognised the potential of digital technologies to improve outcomes for people who use the services and highlighted a positive case study from Andalusia of a more proactive approach to telecare than currently practised in Scotland but said that the Review had yet to focus on their recommendations in this area. Following the publication of the Independent Review early next year, and the Scottish Government's response, the digital strategy should be finalised to enable the digital transformations recommended in adult social care.
- A commitment to creating a single digital health record in an agreed timescale is required for the approach to data in the healthcare sector to be meaningful.
- Health and Social Care - SCDI's forthcoming *Mind the Gap* report (to be published 21 January 2021) is the result of 6 months' research into how data and digital technologies can be harnessed to transform future health and social care services. It makes a key recommendation that Scottish Government should lead the development of i) new **Big Data Strategy for Health & Social Care** and ii) create a **Health & Social Care Transformation Fund** to close Scotland's data gap by:
  - **Strategy:** Developing an ambitious, collaborative, and innovative national approach to harnessing data to transform health & social care which maximises social and economic gains.
  - **Culture & Leadership:** Empowering leaders to drive change by building an ambitious and collaborative national culture of innovation in data, digital and technology.
  - **Skills:** Investing in reskilling, upskilling, and lifelong learning to develop a health & social care workforce better equipped to harness data, digital and technology.
  - **Infrastructure:** Modernising and upgrading health & social care infrastructure to build a single national data architecture which integrates systems, enables data sharing, and creates digital health records.

### Transforming Government

- We agree with Scotland IS in that the investment in the Scottish Digital Academy should be expanded at the same time to provide a resource for the private sector too to become the focus of the digital transformation of all industries and public services.

### Digital and Data Economy

- IT and computing education is limited in primary education. A greater focus on this and more appropriate levels of funding would help to address this issue.
- SQA qualifications should be updated to reflect current needs and future requirements.

- The role of apprenticeships and work-based learning programmes, as highlighted in the Higgins advisory group report on economic recovery, needs to be reflected in the strategy and any action plans. The Scottish Government, industry and education should continue to expand and enhance digital skills and talent programmes to meet industry demand, not only with up-to-date technical content but with wider business skills.
- To address low levels of computing science teaching we would suggest the strategy consider how models such as [Teach Now](#) could be adapted for the data/digital sectors to increase the pool of teaching candidates for computing science in Scottish schools and address any barriers to offering this on the curriculum. Secondments from Scottish Government to the sector should also be considered to accelerate the pace of change.
- Scotland's Digital Skills Partnership, which is delivering CPD for Higher and Further Education teaching staff, should discuss incentives for this and new opportunities, such as summer internships in industry.
- An e-commerce strategy which enables all of Scotland's businesses to trade effectively on-line, increasing resilience and opening new markets, is required.
- Scotland's Higher and Further education institutions and digital skills academies should introduce dedicated and certified courses in ecommerce and its main software platforms.
- The Scottish Government, Education Scotland and local authorities should look at new opportunities for AI technologies to support teachers and learners, and investment in EdTech.
- We would encourage the strategy to include a role for peer-to-peer support. [Productivity Club Scotland](#) launched in 2019 as a peer-to-peer network for (mainly) SMEs to share their insight into actions taken to increase their businesses' productivity. A key focus has been the digital or data investments firms have made and the impact this has had on their businesses. The success of the network since its launch demonstrates the value of peer-to-peer support. In 2021 Productivity Club Scotland will be partnering with Scottish Government and the University of Glasgow to further promote the Scottish Government digital support on offer to SMEs and will run a series of clubs specifically focussed on digital adoption.
- In SCDI's 2020 Upskilling Scotland [report](#) we recommended (#7) Scotland's skills and enterprise agencies need to provide streamlined, intensified and digital products, services and support for employers, especially SMEs, to invest in the digital, management and leadership skills of their workforce. We also recommended (#34) that an Upskilling & Lifelong Learning Fund be created and that this could be used to fund that this could be to fund bitesize digital upskilling courses at any stage of life or career.
- £1m for the Digital Start programme is too little, particularly given the potential scale of demand emerging from the Covid-19 labour market disruption.

## **A Vibrant Tech Sector**

- SCDI support the roll-out of improved teaching and learning of digital and data skills through the delivery of Young Engineers and Science Clubs. SCDI is delivering creative science-based projects including those with coding, data, or digital elements to a network of 1,600 clubs across Scotland. Further scaling up such existing projects with further strategic support was one of the recommendations made in the [Logan Report](#).
- Whilst the Logan report is a useful baseline model for the sector, the digital strategy should also look to join up more specifically the role of Scotland's universities and colleges with the inward investment plan to ensure we are making the most of potential commercialisation and investment opportunities.

### **5.Are any of the potential actions more important than others?**

We believe all the actions outline in our response to question 4 are critical. However, we would highlight the scaling up of initiatives such as Young Engineers & Science Clubs (YESC) a key means to grow the pipeline of future digital talent in Scotland.

## Parameters

The public sector sometimes must work with parameters, some of which may be the financial, statutory, or legal obligations; some or which may be about the wider economic conditions and other factors such as skills shortages. Thinking about these, and any other parameters:

### 6. How realistic do you think it will be to deliver these potential actions?

Please explain why:

All the actions highlighted in the strategy and in our responses are achievable with the right clarity, collaboration, and commitment. Some, however, may face greater challenges than others.

Resources in a post-pandemic world will inevitably be constrained. However, to enable choices to be made the strategy may wish to look at what stakeholders should also stop doing to free up resources for digital investment.

Data and digital investments should also be couched as such with clear investment payback periods and ROI to ensure these investments are seen in the same context as investment in the built environment.

As highlighted previously public trust in government has wavered during the COVID-19 pandemic. We have some of the leading experts in data and AI in Scotland, such as Professor Shannon Vallor and Professor Roma Maguire, who can help advise on the best way forward to overcome these issues through effective structures, collaboration, consultation, and proactive communication.

### 7. Is there anything else you wish to comment on that has not been covered elsewhere?

No

Response form overleaf



RENEWING SCOTLAND'S FULL POTENTIAL IN A DIGITAL WORLD:  
UPDATING THE DIGITAL STRATEGY FOR SCOTLAND

RESPONDENT INFORMATION FORM

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- Individual  
 Organisation

Full name or organisation's name

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The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

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We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

- Yes  
 No