



# A changing nation: how Scotland will thrive in a digital world

**Progress report 2021 - 2024** 

#### 1. Introduction

Scotland's Digital Strategy ("the Strategy"), "A changing nation: how Scotland will thrive in a digital world" was published on 11 March 2021. It was a collaboration between the Scottish Government and Local Government, represented by COSLA and the Digital Office for Scottish Local Government.

It was published as we were coming to terms with the Covid-19 pandemic which saw the acceleration of digital transformation across all sectors. It set out a vision to ensure that Scotland is recognised throughout the world as a vibrant, inclusive, greener, open and outward-looking digital nation.

The Strategy aimed to ensure that Scotland can fully embrace the transformative power of technology by realising the power of data to improve services, increase efficiency and deliver better outcomes. It also focused on how digital technology is designed and implemented, guaranteeing that it is applied in an ethical, secure, efficient and user-centred way.

It made a number of commitments covering three broad objectives:

- "People and place" that all businesses and people should have access to good quality connectivity; the skills and confidence to use digital technology and be reassured that digital technology is used in an ethical way;
- "A strong digital economy" to help. all businesses become digital businesses, and to support our digital technology sector; and
- "Digital Government and Services" to change the culture of public service organisations so that they deliver digital services that are resilient, accessible, and easy to use.

This report summarises progress made in delivering these commitments.

It is important to note though, that the strategy was written between March 2020 and March 2021 in direct response to the COVID-19 pandemic. The full impacts of the pandemic could not have been foreseen at time of publication, which has resulted in considerable changes in how we have delivered some of the strategy commitments.

This is particularly in response to the economic impacts of the pandemic, where new and updated evidence suggests that economic recovery will continue to be uneven and prolonged<sup>1</sup>.

What also could not have been foreseen at the time of publication was the subsequent geo-political crisis, and the increases in global commodity and energy prices, which has led to significant cost pressures across the economy<sup>2</sup>. This in turn

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<sup>&</sup>lt;sup>1</sup> Report by the World Bank on the economic impacts of the Covid-19 pandemic

<sup>&</sup>lt;sup>2</sup> Report by the United Kingdom Government Office for Budget Responsibility on that sets out the impacts of the geopolitical situation on issues such as energy prices

has affected public finances, with major impacts on budget deficits<sup>3</sup>, and knock-on impacts on the funding available to the Scottish Government and Local Government<sup>4</sup>.

The commitments set out in the strategy have remained unaltered over this time, but we have faced an altered and more challenging fiscal environment in which to address them.

The progress set out in this report should, therefore, be viewed with the changed financial context in mind.

It should also be remembered that many of the commitments in the strategy are multi-year and include statements of ambition rather than specific projects or programmes. With this in mind much of the progress set out in this update represents a snapshot in time of where progress currently is, rather than the end state.

#### **COSLA**

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<sup>&</sup>lt;sup>3</sup> Research by the UK Parliament on the economic impact of the Covid-19 Pandemic

<sup>&</sup>lt;sup>4</sup> <u>Scottish Government Spending review published in 2022 that provides background information about the impacts of resource challenges faced by the Scottish public sector</u>

2. Objective 1: "People and place"

#### 2.1 What was the aim?

Digital connectivity, essential digital skills, equality of access and transparency are the foundations for all of our digital ambitions in government. Our joint objectives in the Strategy were that:

- all businesses and people, wherever they may live in Scotland, have access to good quality connectivity;
- everyone is equipped with the skills and confidence at every stage of life to thrive in the digital world; and
- digital products and services are designed and delivered in a way that is inclusive, ethical and seeks to uphold people's digital rights.

# 2.2 How are we delivering this?

# Connectivity

Enhancing Scotland's superfast broadband coverage and maximising the availability of gigabit-capable broadband infrastructure is critical because digital connectivity is an economic enabler and a key part of our plans for green and resilient economic growth. It enables people to work and learn remotely, to keep in touch with friends and family and provides local businesses with the opportunity to conduct business worldwide.

When the Strategy was published in 2021 the Digital Scotland Superfast Broadband (DSSB) programme had extended fibre broadband access to more than 950,000 homes and businesses across Scotland. This transformed access to broadband in rural areas, with 65% of premises in Orkney, 75% in Shetland and 79% the Western Isles able to access superfast broadband. We made commitments in the Strategy to go further than this and to ensure broadband coverage for all.

The 'Reaching 100%" (R100) programme is investing over £600M in digital infrastructure across Scotland, with the R100 contracts expected to continue to deliver gigabit-capable connections until 2028. This is a huge and complex civil engineering undertaking which requires the construction of many miles of new ducts and cables. Where a premises is beyond the reach of the R100 contracts or commercial build plans, the R100 Scottish Broadband Voucher Scheme offers up to £5,000 to eligible premises to secure, as a minimum, a superfast connection.

At the same time, the Ofcom 'Connected Nations' report noted that approximately 20% of Scotland's landmass – mostly harder to reach rural areas – did not have mobile 4G coverage from any mobile company. In recognition of this, the Strategy committed to improve rural mobile coverage to ensure that our hardest to reach communities had access to 4G mobile services.

<sup>5</sup> Ofcom Connected Nations report for statistics about 4G coverage in Scotland

# Digital skills

Good connectivity is just one of the founding principles of a digitally inclusive nation. Everyone, not just people directly involved in the tech sector, needs sufficient digital skills so they can benefit from digital technology. When the Strategy was published in 2021, research indicated that 75% of all job advertisements required basic digital skills – such as the ability to use spreadsheets – so that people lacking even these skills had significant barriers to entering the labour market<sup>6</sup>.

The Strategy made commitments to:

- strengthen the digital capabilities of the current workforce to respond to the changing requirements of the current workplace; and
- increase the diversity of the current and future workplace, so that digital solutions are more representative of society.

# Digital inclusion

Even in 2021, digital technology had become so crucial to our everyday lives that people without sustainable digital access were unable to access essential services. When the Strategy was published, data from the Scottish Household Survey stated that digital access in the most deprived areas was lower than in the most affluent areas (82% compared to 96%); and that the number of adults aged over 60 accessing the internet was significantly lower in comparison to adults of all ages (66% as opposed to 88%).

Our commitment in 2021 was to extend the Connecting Scotland Programme. Connecting Scotland's vision is to create digital opportunity for everyone in Scotland and provide internet-enabled devices, connectivity, and digital skills support to people across Scotland who are digitally excluded. This vision is underpinned by three principles: empowering people to thrive and improve their wellbeing through digital access; enabling organisations to work together and improve digital inclusion services; and engaging with users to ensure that what we do meets their needs, and no-one is left behind.

#### **Ethics**

The final area in terms of people and place concerns ethical use of digital technology. Research indicated that the UK scores lower than most European countries on the public sector's ability to safeguard the data of its citizens' privacy, and reduce misinformation<sup>7</sup>. The Strategy committed the Scottish Government to develop and embed an ethical framework; and to continue to work in partnership with stakeholders and the public to develop principles underpinning the design and build of digital public services and conducting digital trade.

<sup>&</sup>lt;sup>6</sup>Report setting out the need for all jobs to have basic digital skills

<sup>&</sup>lt;sup>7</sup> Article in the Harvard Business Review setting out the findings of research on public trust on the public sector's ability to safeguard citizen data

The Strategy also reinforced the commitments set out in the Open Government action plan: 2021 to 2025 to promote transparency and accountability to ensure that people are empowered to gain insight into how data is used in the design and delivery of services.

An ethical approach to data also becomes increasingly important when considering the growth and expansion of Artificial Intelligence (AI) into everyday life. It is vital that Scotland can maximise the potential economic and social benefits of AI. To address this, in 2021 the Strategy committed to publishing an AI Strategy which would have as its core principle open and meaningful dialogue with the public and stakeholders. The aspiration is for Scotland to set the global standard for responsible ethical and trusted development and application of AI.

# 2.3 What progress has been made?

# Connectivity

We are exceeding our Superfast Broadband commitment by delivering full fibre connections for the vast majority of premises included in the R100 contracts. This can enable download speeds of up to a gigabit (1,000 megabits per second) – 30 times faster than our strategy commitment – and establishes resilient rural connectivity for generations.

The programme has laid 16 new subsea cables in preparation for terrestrial build, to connect 15 Scottish islands and enhance Scotland's digital infrastructure resilience for generations. By the end of 2023, over 36,000 connections had been built through the R100 contracts, with delivery of a further 9,000 premises unlocked thanks to R100 contract build in those areas.

# Case Study - Superfast Broadband Subsea Cables connecting Fair Isle

A subsea cable now stretches the Shetland to Orkney Islands, with a spur connecting Fair Isle almost two years ahead of schedule.

"We are a small population and want to grow and encourage people to be a part of our community. Getting a full fibre connection so that people can more easily work and live here is a major part of that. We need all hands on deck to make the island run." (Fiona Mitchell, Postmistress).

In what is believed to be a world first, our delivery partner Openreach had to deploy innovative engineering to boost the signal strength due to the distances involved.

"Regular fibre signals just couldn't go the distance, so we had to get creative with some world first engineering to transmit life-changing ultrafast broadband over 100 kilometres to islanders. We had to do everything differently on Fair Isle, from planning around bird nesting seasons to setting up flat-packed cabins for our crew." (Fraser Rowberry, Openreach Chief Engineer for Scotland)

In addition, around 3,700 connections had been delivered via the R100 Scottish Broadband Voucher Scheme.

# Case Study – Scottish Broadband Voucher Scheme Recipient in the Scottish Borders.

"...with this connection I can chat, video call and even send e-cards to everyone. If I didn't have the connection, I would feel alone and quite honestly wouldn't be very happy".

By December 2023, the Scottish 4G Infill Programme had built and activated 55 mobile masts covering 1,823 households and 388 businesses in rural and island Scotland.

In Local Government, councils within the Tayside City Region completed an Infralink Exchange pilot with Scottish Futures Trust (funded by the UK Government) to provide greater access to data about current mobile coverage, and the availability of council assets in the region that could be used to host telecommunications equipment to telecommunications providers.

# Case study – S4GI Impact Rhins of Galloway, Dumfries and Galloway

"Prior to the mast being installed we didn't have mobile phone coverage which left us feeling isolated and being left behind "technically". We used to have to walk into a field to try and get a signal. We can now enjoy the freedom of going online, being able to make and receive calls and are not afraid of missing any business calls which is especially reassuring for our business".

# Digital skills

Over £4 million has been invested via Skills Development Scotland to upskill the current workforce and improve diversity. This resulted in initiatives including:

- The Digital Start Fund to support people on benefits or low incomes to move back into the workforce, or from existing jobs into higher value tech jobs;
- The Digital Skills Pipeline which provided funded courses for people on low incomes to begin building their digital journey so they can progress into digital careers such as cyber security, software development and data analytics; and
- Grant funding to Code Your Future which supported vulnerable people, including refugees, to progress into jobs in the tech sector.

<u>Case study - how Code Your Future has helped Ahmed to go from asylum seeker to software developer</u>

<u>Case study - how Code Your Future has helped Colette find employment in the digital tech sector</u>

Scottish Government has awarded £170,000 to Digital Xtra to support their 7th and 8th round of grants in 2021/22 and 2022/23. They provided grants of up to £5,000 to organisations delivering extra-curricular computing and digital technology activities for young people.

In 2021/22 this supported 35 grants covering 24 Local Authorities and included 23 primary schools, 3 secondary schools, 3 colleges or universities, 2 libraries, and 4 additional educational bodies. In 2023/24 This funding supported 26 schools and educational organisations. The 26 grants covered 18 Local Authorities and included 13 primary schools, 4 secondary schools, 1 school for pupils with additional support needs, 2 councils, 1 library and 5 additional educational organisations.

# Case study - how Digital Xtra has made a real impact on people's lives

Since 2022/23, the Scottish Government has provided funding of £430,000 for public sector organisations to upskill their employees in cyber security qualifications and certification to help strengthen their cyber security defences. The first phase of this funding in 2022/23 benefited 85 workers from across 30 organisations including 17 Local Authorities, 12 NHS Scotland Boards (including Scottish Fire and Rescue and Scottish Ambulance Service) and The Scottish Environment Protection Agency.

# Digital inclusion

To address digital exclusion, Connecting Scotland has provided 61,000 devices delivered in collaboration with key partners, including SCVO, Local Authorities, COSLA, and third sector organisations. Devices came with a minimum of 2 years free connectivity and skills support training.

Research shows the extent to which Connecting Scotland has impacted on their lives:

- 86% told us they were more able to stay in touch with family and friends;
- 83% stated they were more able to find interests to stay mentally active;
- 74% said that their mental health has improved;
- 86% told us that their digital skills had improved during their time with Connecting Scotland.

Since publication of a Full Business Case in 2023, the programme has evolved to provide a wider range of models to support more people in different ways.

# Case studies – users have shared their experiences of the support provided by Connecting Scotland:

"Now I can go on FaceTime and everything and see my daughter and grandkids. It's brilliant, it's changed my life. It's like day and night."

"That's my lifeline. It might not sound a lot, but in my mind it makes me in my body feel better, not as tense as what I am. If that wee green button is on, I can contact anyone at the touch of a button. In your flat, you could batter the windows and doors and nobody would know".

"It's saved my sanity to tell you the truth. The thought of being on my own with no one. It's opened up my life and let me live a bit more. It's kept my brain ticking and kept me sane."

"It's been life-saving just to have the Mi-Fi connection... I had been homeless for 3 years and it was daunting - trying to keep in touch with people and trying to find work."

"It's been very helpful, before this device I could not use a computer. There are lots of different things that I have been able to do....looking for work and [managing] my Universal Credit."

The Digital Participation Charter Fund invests in community digital inclusion projects across Scotland, with a focus on digital skills. It provides small grants to help a range of organisations tackle poverty, social isolation, and other forms of inequality in society through embedding digital upskilling in day-to-day activities. The support given through the Fund enables organisations to help the people they support to realise the benefits of digital and build their skills and confidence.

#### **Ethics**

We commissioned an expert group on digital ethics to outline priority recommendations for digital ethics. An action plan on these recommendations is now under development and will be published later this year.

<u>Full progress update on the open data commitment to promote transparency and</u> accountability to ensure that data is being used in an ethical way

We also launched the Unlocking the Value of Data programme in March 2022 to support ethical decision-making by data controllers regarding private sector access to Scotland's public sector personal data. This was initially steered by an Independent Expert Group whose final report<sup>8</sup> was published in August 2023, along with supporting evidence, and we are now considering the group's recommendations.

<sup>&</sup>lt;sup>8</sup> Final Report of the Independent Expert Group to the Scottish Government on Unlocking the Value of Data - Unlocking the value of data - Independent Expert Group: final report - gov.scot (www.gov.scot)

Scotland's AI Strategy was published in 2021 and has delivered several key products as we work towards our aspiration for trustworthy, ethical and inclusive use of AI in Scotland. Key products delivered as part of the AI Strategy include:

- Al Register<sup>9</sup>, developed in collaboration with Finnish start-up Saidot as part of a CivTech challenge. Launched in March 2023, it makes transparent the development and use of Al in the public sector;
- Al Playbook<sup>10</sup>, guide to Al in Scotland. It provides a one-stop source of information and shared best practice which everyone in the Scottish Al community can use and contribute to;
- Living with AI course<sup>11</sup>, a free online course, Developed by the Scottish AI Alliance in partnership with The Alan Turing Institute, the Royal Society of Edinburgh, and the non-profit We and AI;
- Al and Children programme<sup>12</sup>, a collaboration with The Alan Turing Institute and the Children's Parliament. Phase 1 explored children's rights in Al, working with Primary 5 to 7 classes from four schools in Edinburgh, Glasgow, Doune and the Shetlands. Phase 2 began in April 2023;
- Scottish Al Summit<sup>13</sup>, the annual flagship conference of the Scottish Al Alliance, showcasing trustworthy, ethical and inclusive Al activity across Scotland.

<sup>&</sup>lt;sup>9</sup> Scottish Al Register

<sup>&</sup>lt;sup>10</sup> Home - Scottish Al Playbook

<sup>&</sup>lt;sup>11</sup> Living with AI — Scottish AI Alliance

<sup>&</sup>lt;sup>12</sup> Exploring Children's Rights and AI - Children's Parliament (childrensparliament.org.uk)

<sup>&</sup>lt;sup>13</sup> Scottish Al Summit

# 3. Objective 2: A strong digital economy

#### 3.1 What was the aim?

Businesses of all sizes, and in every sector, need the capability to respond to the opportunities and threats that digital offers. Our joint objectives were to:

- make it possible for all businesses not just the digital technologies sector to be digital businesses, and to support them to adapt and be secure and successful; and
- create the conditions for the Scottish digital technology sector to grow, thrive, create jobs and attract investment.

# 3.2 How are we delivering this?

The Scottish economy

When the Strategy was published, Small and Medium Enterprises (SMEs) accounted for 40% of private sector turnover and employed 55% of private sector employees<sup>14</sup>.

The Strategy made commitments to support the digital capabilities of SMEs to improve their productivity by:

- increasing their ability to analyse the data that they hold to improve their decision making, and operate more effectively;
- upgrading their IT systems so they are faster, more resilient, and enhance the customer experience; and
- developing the digital skills of their staff to use digital technologies securely and effectively.

The Strategy also recognised the threat from cyber incidents, and the need for all businesses to improve their cyber resilience to guard against cyber-attacks and have robust plans in place for a rapid response to get back online if subject to attack.

The Scottish digital technologies sector

The Scottish digital technologies sector has an impressive reputation globally. When the Strategy was published, the Scottish tech ecosystem contributed £4.9 billion Gross Value Added to the economy<sup>15</sup>, and we made commitments to:

 support the recommendations of the Scottish Technology Ecosystem Review (STER), so start-ups have the sufficient support to become future SMEs;

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<sup>&</sup>lt;sup>14</sup>National Statistics for Scotland Report on the Sottish Business Sector

<sup>&</sup>lt;sup>15</sup> Scotland's Digital Technologies Summary Report 2019

- ensure that the sector can optimise 5G technology, by introducing a network of 5G Hubs, to attract investment (a potential estimated £17 billion contribution to GDP of the Scottish economy by 2035); and
- ensure that CivTech, our award-winning public-sector tech accelerator. continues its key role by creating opportunities for entrepreneurs to develop solutions to public sector and third sector challenges, which create new jobs and embed innovation.

#### 3.3 What progress has been made?

# The Scottish economy

Over the lifetime of the DigitalBoost Programme nearly 40,000 people attended webinars/workshops with 4,000 businesses receiving intensive one-to-one support via the Programme. An independent impact evaluation showed that, in 2021, the £1.6m invested in the Programme that year resulted in 800 new jobs and £40m of net additional GVA. DigitalBoost funding was reduced by 25% in 2022/23 and the programme was discontinued the following year. Given the ongoing demand for digital support from Scottish SMEs, in 2023/24 COSLA's Business Gateway National Unit secured Council Leaders' agreement to use some limited resources to continue to deliver as many digitally themed webinars as possible and will continue this through 2024/25. In addition, some councils are using the UK Government's Shared Prosperity Fund to deliver intensive one-to-one digital support.

The 2023-24 Programme for Government set out a new way for the Scottish Government, Local Government and our agencies to transform the way we support small businesses to make it easier for businesses across Scotland to access the support available to them.

# Case studies - how small businesses have been supported via Business Gateway

Through the Digital Development Loan we have provided £12 million in zero interest loans to businesses to adopt and optimise for new digital technologies, improve productivity and grow business. This assisted 200 businesses and created 1,200 jobs. This is in addition to over £40 million of grants which were disbursed to over 5,000 businesses through the Scottish Government's Digital Development Grant<sup>16</sup>.

These digital support programmes were vital to help businesses survive and thrive through the Covid-19 pandemic. In a post-pandemic world, foundational digital technologies should be regarded as a necessity for all businesses, and therefore digital should now be considered in all forms of business support. This is being taken forward via the Business Support Partnership.

<sup>16</sup> Reported benefits for DigitalBoost 1-2-1 beneficiaries reflect, for a significant proportion of 1-2-1

clients, the combined effects of DigitalBoost 1-2-1 support, other support via DigitalBoost, and Digital Development Grants/Loans. Net additional GVA of £40.3 million was estimated for 2021. It is noted that use of multipliers has a strongly positive effect on the net additional estimates.

The new Scottish Cyber Coordination Centre (SC3) is a significant leap forward for Scotland and will raise our capabilities and capacity to tackle the threat, risk and harm that cyber incidents pose and cause. It is an integral part of our multiyear national strategy to build a cyber resilient Scotland.

Cyber "Exercise in a Box" has helped organisations understand how resilient they are to cyber-attacks and lets them practise their incident response in a safe environment. This was delivered between April 2021 and February 2024 to 800 organisations. Private sector organisations made up the largest proportion of this number.

The Scottish digital technologies sector

In support of the STER recommendations that start-ups have the sufficient support to grow and become future SMEs, in July 2022 we awarded a five-year £42 million contract to Codebase to deliver a national Techscaler Network to support tech start-ups in Scotland, and to help them grow to scale.

To promote and accelerate 5G adoption we have invested £14.5 million in the Scotland 5G Centre, including its network of seven 5G innovation hubs. And recognising that Local Government has the potential to be a major market for IoT technologies, the Local Government Digital Office is working in partnership with CENSIS, Scotland's Internet of Things Innovation Centre, to promote and accelerate adoption within Local Government.

During its first seven years, CivTech has set 92 Challenges for tech entrepreneurs and companies. Over 900 companies have responded to these Challenges, with 107 progressing to the accelerator stage (over 90% of them being start-ups or SMEs). Of the teams participating in the accelerator stage, 86% are currently operational – this survival rate is far higher than the private sector norm in which 20% of new businesses go under within 12 months, and 60% within three years. Current private sector investment into CivTech companies stands at over £100 million, and as of March 2023, CivTech companies reported 330 jobs created.

# Case study – Sentireal, CivTech 7

Immersonal worked with CivTech and Victim Support Scotland in 2022 to develop a Virtual Reality experience designed to familiarise first time court attendees with the often difficult and stressful process. Not only is their solution being rolled out across all Scottish courts, but it has been presented at the Victim Support Europe conference in Berlin with the potential of serving 72 VSE members in 35 countries. They have also been given a contract to develop solutions for the International Criminal Court.

# 4. Objective 3: Digital Government and Services

# 4.1 What was the aim?

The 2021 Strategy recognised that digital has the power to change the nature of government and how we deliver our public services. This requires us to reform how we design and deliver services and change the culture and structures of our organisations.

# 4.2 How are we delivering this?

# Common digital platforms

Digital public services deliver better benefits when we collaborate across the public sector to deliver common digital platforms. Most public services – whoever they are delivered by – follow a similar pattern. And this pattern can be broken down into common 'building blocks'. Users provide information to prove that they are eligible for, and gain access to, the service they need. The public body then facilitates access, for example by making a payment or issuing documentation. The previous design of services has tended towards bespoke solutions to common problems, resulting in siloed systems that exacerbate challenges in data sharing and service delivery.

In 2021 we committed to national and Local Government working together to create common solutions that can be re-used and deployed with ease across the public sector. This approach would reduce duplicative investment and operational costs; improve the customer experience; strengthen resilience by targeted investment in cyber defences; and enable greater innovation.

Our immediate focus was on the development of three platforms: an identity platform to enable users to confirm their personal identity securely to access public services in a digital way; a payments platform to process a range of financial transactions; and a cloud operations service to support the public sector to make efficient and secure use of cloud technology.

# Enablers of this approach

In setting out this ambition the Strategy recognised that there were several enabling projects that needed to be put in place to ensure the success of our approach:

- to support organisations to deliver digital transformation we committed to a Digital Support Hub a single point to access high quality guidance and tools;
- the Scottish Digital Academy facilitates digital leadership and a skilled digital workforce with a focus on courses covering a variety of themes such as agile methodologies, service design, AI, cloud, cyber and data. The Strategy committed us to growing and enhancing this;
- we committed to adopting the Scottish Approach to Service Design to ensure that services are designed around the needs of users, not from the traditional perspective of organisations. This ensures that services are seamless and

easy to access, and that people are empowered to participate in the design of public services;

- we recognised the key role of data in digital transformation, with a focus on standardising data to make it easier to find and reuse; and working with organisations to increase their capabilities to improve data reuse. This aimed to increase transparency and trust, empower communities to take decisions about services that impact on them, and fuel innovation;
- we recognised that digital is evolving at an exponential rate, and the need to
  explore how new technologies such as automation can improve efficiency. We
  continued our commitment to CivTech, the world's first Government-run
  accelerator for digital public services, to foster innovation and sustainability
  into how the public sector uses technology by openly sharing challenges and
  ideas to co-producing innovative solutions to old problems;
- we committed to build security into digital public services, to ensure their privacy, integrity, and availability. This aimed for consistency in how public bodies assessed cyber resilience arrangements; identified areas of strength and weakness; and took informed decisions on how/whether to achieve higher levels of resilience.

# 4.3 What progress has been made?

Common digital platforms

Common Platforms Key Achievements Include:

- 11 public sector organisations now using the Cloud Platform Service.
- Minimum Viable Service delivered for the Payments Service and on-track to go live in 2025;
- ScotAccount now a live service with Disclosure Scotland;
- Local Government 'myaccount' has 2.4 million registered accounts and live with 40 organisations.

Our digital identity ecosystem is increasingly mature, with different component services deployable for different identity and verification challenges across the public sector. Scot Account has been developed by the Scottish Government, and offers a user-friendly sign in, together with identity verification to the industry standard for digital identity verification services.

This level of verification is necessary for the delivery of certain public services and the prevention of fraud and identity theft. Adhering to this industry standard will also be key for potential future interoperability with UK Government services and the European identity wallet.

ScotAccount launched in February 2023 and is live with Disclosure Scotland, has a further pilot underway with the Crown Office and Procurator Fiscal Service, and more public services are coming on board during 2024-25. Mysafe offers users the ability

to store verified personal information for reuse in the future, and later this year our Mailbox and vouching solution will come online.

Myaccount is an authentication and identity verification service, which can be deployed in a variety of configurations to meet different organisational needs, requirements and is proportionate to the services citizens access. Developed by Local Government, myaccount has 2.4 million registered accounts, and is live with 92 integrations across 40 organisations, including all 32 Local Authorities. Myaccount is also integral to two national services, parentsportal.scot and getyournec.scot.

ScotPayments is a pioneering collaboration with public sector partners, reshaping payments processes across the public sector. Ongoing enhancements to the service include the implementation of the Confirmation of Payee feature, to further fortify fraud protection. As a robust Minimum Viable Service, it has efficiently processed over £22 million in outbound payments, using automated functions to reduce manual processing and mitigate the risks of fraud and error. The programme is poised to deliver substantial savings over a 10-year period, by streamlining processes, reducing system downtime, speeding up payment processing, and minimising errors by cutting manual steps.

The Cloud Platform Service will be offered as a live service from April 2024, meeting the performance and security needs of government and public facing services. This common platform service gives Scottish Government and Scottish public sector organisations simplified, secure and discounted access to cloud technologies in order to host their systems/workloads effectively in line with Scottish Government and industry standards.

In parallel there is a significant programme of work to introduce common digital platforms for Local Government; this includes MyJobScotland an online recruitment service for the public sector, the 'OneScotland' Gazetteer which provides records of addresses and streets across the whole of Scotland and a Shared Alarm Receiving Centre solution to support councils and housing associations with the migration to digital telecare.

# Supporting organisations to transform

The Digital Support Hub currently provides a one stop resource for a growing range of guidance, articles, case studies and resources to enable public sector organisations to transform digitally. Similarly, within Local Government, the Digital Office for Scottish Local Government has created a central catalogue of digital resources containing case studies, blueprints, and guidance relating to issues such as leadership, skills, service design, and cyber security.

The Digital Programme has been established in Scottish Government to further address the key challenges of how we deliver on our digital ambitions and implement the culture change necessary to deliver successful public services in a digital age. It will change the way that Scottish Government 'does digital' by implementing a new operating model that drives efficiencies and delivers a better user experience.

It is comprised of several projects and workstreams that will establish new ways of working. This includes:

- a refreshed Digital Support Hub with a new shared model for how digital work is taken forward:
- a new Digital Scotland Service Manual aligned to the Digital Scotland Service Standards which will be hosted on gov.scot. The manual will include guidance on a wide range of topics to give organisations a clear set of principles to follow when designing digital services;
- we are also currently delivering workstreams on public sector architecture, managing capability via a shared model, user-centred design, commercial and purchasing and data.

By the end of this Parliament, we will introduce digital portfolio management to ensure better prioritisation of digital spending within Scottish Government and agencies. This will ensure we are doing the most important digital work; work that will have the greatest impact in terms of value, quality and reuse.

Digital skills and capability in the Scottish public sector

To date the Scottish Digital Academy has delivered learning to more than 14,000 people across 350 public and third sector organisations. It has increased the number of courses offered to broaden the depth and breadth of the learning offer; and now offers courses across a range of subjects including data, cyber, cloud, service design and agile.

Key Achievements of the Scottish Digital Academy in 2023 include 17:

- increased delivery of professional learning by 77 per cent;
- delivery of professional Al leading to 299 public/third sector leaders;
- artificial intelligence learning has been accessed by civil servants more than 439 times since it was introduced in November 2023.

The Scottish Digital Academy has also published on its website an approach on how it intends to measure the impact and value of its work over the next few years

The Scottish Digital Academy has also worked in partnership with the Digital Office for Scottish Local Government, to deliver learning. For example, working with the Scottish Government Data Division and Perth and Kinross Council to develop an online learning resource to build data literacy across the public sector.

This partnership working is also helping councils across the board improve the digital skills of their staff. Our digital skills programme supports councils to understand their skills gap, adopt a digital competency framework for digital professions and develop specific learning opportunities where there is demand. Putting users at the heart of service design

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<sup>&</sup>lt;sup>17</sup> Annual Monitoring 2023 - Scottish Digital Academy

The Scottish Approach to Service Design is now well established in Scottish Government, for example in Healthcare Quality and Improvement and Social Security. We are also working collaboratively to develop a Service Design Champion course for councils and a Service Design Challenge process and training to build design capacity in Local Government.

#### Data

A 12-month Discovery phase is now underway to establish a roadmap to deliver sustainable data reuse across the public sector for AI, seamless public services and Scotland's Census. This will establish a consistent approach to data management and analysis, recognising that data availability is a key barrier to public sector reform.

Key work to improve the foundation of how we use data include:

- a community of practice for Data Standards and Open Data has been established to encourage the public sector to publish more open data. It provides a platform for around 290 members to seek out advice and support, share best practice, find solutions to common challenges, and increase innovation;
- Scotland's official statistics publishing platform statistics.gov.scot<sup>18</sup> provides 300 free and unrestricted data sets at the highest level of openness from official statistic producers and public bodies across Scotland;
- a new data discovery tool Find.Data.Gov.Scot<sup>19</sup> has been launched to make public sector data easier to find. The beta version, developed through a CivTech challenge, helps users discover hidden datasets using simple terms, provides feedback to data providers and can recommend datasets to users.

The Data Transformation Framework is helping organisations in the public sector to understand what 'good data practice' looks like.

This has allowed for the development of 'foundations' - Leadership, Strategy, Governance and Data Discovery. All need to be addressed for data transformation to develop successfully. Engagement is the cornerstone of the Framework, and one way this is done is through the data maturity programme, to help organisations open up discussions about data improvement and become data driven organisations.

Seventeen organisations have completed the programme and a further 17 are due to complete by June 2024, providing a growing alumni who share their experiences and develop shared thinking on best practice to develop data maturity.

More information providing an update on our Data Maturity programme and its development

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<sup>&</sup>lt;sup>18</sup> statistics.gov.scot

<sup>&</sup>lt;sup>19</sup> Find.Data.Gov.Scot

# New technologies and innovation

The Public Sector Centre of Excellence for Process Automation is delivering Al powered automation using robotic process automation, machine learning, and generative Al amongst other capabilities. This has now delivered over 70 automation programmes across the Scottish Government and public sector bodies, including Social Security Scotland, Scottish Public Pensions Agency, and the Student Awards Agency for Scotland.

CivTech's 2022-26 Full Business Case was approved by Scottish Ministers in May 2022, and includes the significant scaling of the programme, with up to £46 million allocated over the lifetime of the Parliament for the development of innovative solutions to public sector problems. The Business Case also includes work to instigate and develop a Scottish GovTech Cluster to foster partnerships and resources, and promote Scottish GovTech initiatives that transform public sector services.

# Case Study – HomeLINK and Stirling Council

HomeLINK, a CivTech 3 company, worked with Stirling Council who required a solution to help improve services by better understanding investment requirements for their public buildings. HomeLINK developed a system that brought together information from all the existing smart connectivity technologies into one device and backed all that information up in the Cloud. HomeLINK are currently implementing the largest roll-out of IoT sensing devices for social housing in the UK.

They now work with around 600 landlords which is representative of 25% of all UK social housing landlords and expect to have installed around 1 million of their devices by 2024.

# Cyber security

As part of the Strategic Framework for a Cyber Resilient Scotland we have refreshed the Public Sector Cyber Resilience Framework which was introduced to help public bodies to assess their cyber resilience and identify strengths and weaknesses. In support of secure and resilient public services, we delivered the Executive Cyber Education programme to senior managers and board members and delivered facilitated "Exercises in a Box" sessions.

The Local Government Digital Office and Scotland Excel are also working in partnership to put in place a procurement framework contract to provide an efficient procurement route to assured Security Operations Centre services for individual local authorities.

# 5. Next Steps – a new Strategy for Scotland

Our digital strategy has generally been refreshed every three to four years; this is in part to respond to the challenges and opportunities that new and emerging technologies bring. It also in part reflects the fact that the ever-tightening financial context and the need to deliver more with less to ensure that the next iteration of the digital strategy is achievable within current and future budgets.

As we look ahead, we know digital is a critical enabler of public service reform, with digital thinking and reform thinking closely aligned and we are committed to taking those opportunities to support efficiency, simplification, streamlining and accessibility. Public service reform aims to transform services to ensure services are efficient, high quality and effective for all and, where people are at risk of poor outcomes, services can identify this early, build relationships with citizens to understand their needs and work together to meet those needs. We recognise pressing budgetary challenges reinforce the absolute need to increase efficiency and effectiveness.

As the current Strategy was published in 2021, a new iteration is now required. The work that we have done in evaluating the progress set out in this report has contributed to that decision.

Work has now begun to develop the next iteration of the Digital Strategy following publication of this report. Our intention is to publish a new iteration in the next year.



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