



Scottish Government
Riaghaltas na h-Alba

Scottish Digital Academy Monitoring Report

October 2022

Scottish Digital Academy Monitoring Report 2022

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Foreword

The Scottish Digital Academy Monitoring Report gives voice to a range of activities undertaken since inception in 2017, with a specific focus on the work of the team over the last year. This is the first time that we've published such a report, but we continue to build digital capability as a key priority for the Scottish Government and from our initial beta in 2018, we've established the Scottish Digital Academy as a leader in digital skills development in the public and third sectors in Scotland.

Expanding our reach, our breadth and depth of courses, and our partnerships, has also seen us develop a leading reputation across public sector bodies in the UK and beyond.

The need for organisations to build digital skills has never been more pressing, with clear signs that demand for digital skills is outpacing the supply; a problem not unique to any sector, region or country. We continue to see exceptionally high demand for quality learning and development tailored for the public and third sectors, which has been further accelerated by the increasing pace of transformation since the start of the 2020 coronavirus pandemic.

The Scottish Digital Academy provides a pathway for capability development for public sector staff to deliver digitally-enabled services. It accelerates the delivery of a strong, digitally skilled workforce which is a key driver of inclusive economic growth and helps us build stronger professional communities across central and local

government. It is only by investing in skills and capability development that we can address some of the challenges we face. I'm proud to see the impact the Scottish Digital Academy is having in all areas of digital and I'm excited to see how we develop our offer further; ensuring that everything we do is designed with and for our users.

There has been an increasing focus on the need for greater leadership capability in the digital space and I'm pleased to see our offer develop to meet this challenge. Our new flagship leadership programme, launched in March 2022, is setting the standard for supporting experienced and new leaders in driving digital transformation.

I look forward to the coming year and seeing our offer grow even further, deepening our work with Local Government, and ensuring we have clear development pathways for everyone interested in building a career in the digital profession.



**Yorath Turner, Deputy Director
Digital People, Strategy and Corporate
Services**

Executive Summary

In a time of significant change, we recognise that digital skills are needed at every level of an organisation and across all job roles and grades. The Scottish Digital Academy has increased the support that it provides through a range of courses, programmes and coaching activities, with the aim of accelerating positive outcomes for people in Scotland.

In recent years there has been growing global momentum to strengthen and scale the transformation of digital products and services. The future of Scotland as a thriving digital nation, as illustrated in the Digital Strategy [*A changing nation: how Scotland will thrive in a digital world \(2021\)*](#), relies on people being equipped with the best possible learning experiences. Ensuring we have a strong and digitally skilled workforce is a key driver to inclusive economic growth. [*The Scottish Technology Ecosystem Review \(2020\)*](#) identifies education and talent as being one of three fundamental supporting areas upon which the performance of Scotland's technology ecosystem depends. Digital skills development is critical and the Scottish Digital Academy continues to deliver a central, coordinated, cost-effective and coherent programme of professional learning and agile coaching.

In writing this report, we have used qualitative and quantitative data to illustrate our value and impact. For example, we have seen an increase in the number of courses provided during the pandemic, with a record number of people and organisations engaging with us through both a universal and targeted approach. This has started to lead to improved digital services across the public sector.

The expansion of our portfolio includes several new courses to support transformation and this year, we introduced a substantive leadership programme, *Leading in a Digital World*, building professional capital and capability by developing digital champions and offering senior leaders an opportunity to exchange ideas, discuss solutions to shared challenges and utilise opportunities for collaborative working.

We've continued to support approaches to increasing diversity in digital leadership roles with a focus on women seeking to develop their knowledge and experience in leading digital transformation and cyber security, in association with ScotlandIS and Empowering You. The *Empowering Women to Lead* programmes have been very successful and some graduates have subsequently moved into leadership roles with others feeling more confident and empowered in their responsibilities.

In addition to our success on leadership and professional learning, we continue to drive innovation through CivTech® as a challenge sponsor, working alongside This is Milk in the development of an immersive learning application, since recognised and nominated through the Herald Scotland Digital Transformation Awards 2022.

We recognise that developing, testing and using emerging technologies has benefits for those working in the digital technology sector as well as for those requiring specialised resources or adaptations to the learning process. Our focus on technological delivery is underpinned by research and literature, providing new approaches to support professional learning.

Through our partnership with Skills Development Scotland, we've been able to provide access to courses via our website and professional learning network to improve digital skills. Funded by the Scottish Government's National Transition Training Fund (NTTF), our aim was to help people develop new skills through free digital learning as part of recovery from the pandemic, open to those aged over 25 seeking to reskill or upskill. We had more than 740 registrations from a range of organisations and backgrounds to include, Scottish Government, local authorities, NHS, Courts and Tribunals Service, Creative Scotland, National Records of Scotland, Social Security Scotland and Education Scotland. From the total number of registrations, 50 per cent were from local government and 18 per cent from the Scottish Government.

Crucially, feedback from those engaging with us remains positive and we're starting to see clear and measurable evidence that our work is beginning to lead to improved outcomes and a real sense of collective efficacy. Our impact goes beyond the numbers quoted within the report, as for every engagement there is a human interaction. We use logic modelling to capture our current thinking about how our work leads to short, medium and long term benefits and in contributing towards the outcomes identified within the National Performance Framework (NPF).

In a time of significant change and digital transformation, the need to design and build effective, efficient and fit for purpose public services has never been greater. With a focus on people at the centre of the service and on developing an agile culture, our Senior Agile Coach, Lead Specialists and our official coaching service partner have helped teams to identify barriers and solutions to progress. There is no single package of support, rather we have worked with organisations to understand what interventions are required before designing and implementing a service that meets their needs.

We will continue to build upon the work of the Scottish Digital Academy to establish it as the skills provider of choice for the Scottish public sector. This will continue to accelerate the delivery of digital skills that we need both now and in the future, building stronger professional communities to share best practice and develop leadership capability. In becoming the digital skills provider of choice, the Scottish Digital Academy will deliver and facilitate high quality professional learning and training, with a specific focus on transformation and digital skills, whilst promoting the principles of a digital nation.



About Us

About Us

In realising our aim, we organise our work into thematic priorities as illustrated in our strategic model. It outlines the themes that will build capability and promote collaborative practices through a shared language and aspiration.

Our aim and ambition

The Scottish Digital Academy is part of the People, Strategy and Corporate Services Division within the Scottish Government Digital Directorate. We provide high quality professional learning and agile coaching to support digital skills and leadership capability development across the public and third sectors in Scotland, building capacity to support transformation. In doing so, our team supports the Digital, Data and Technology (DDaT) profession by providing opportunities for up-skilling and re-skilling, supporting all organisations and employees regardless of job role and grade.

It's our aim to become the digital skills provider of choice, by working collaboratively with all our stakeholders and partners to secure sustained improvement in building and enhancing digital skills. We do this by creating opportunities to develop knowledge and understanding, collaborate within strong professional communities, develop digital leadership capability and focus on nurturing digital mind-sets, innovation, partnership and community.

We take a user centred approach and we put the people we serve at the heart of everything we do. We use digital thinking and approaches beyond the use of technology, considering the expansion and

use of the methods and approaches developed within the digital sector which support continuous improvement. This enables us to better adapt and respond to changing circumstances, strengthening our work and providing a better service for those engaging with our offer.



The Strategic Model illustrates our thematic priorities.

In delivering our aim, we have identified a series of thematic priorities which have been drawn from the principles of the Digital Strategy.

They are described in detail within our Strategic Business Plan 2021-2025 and they underpin our work and our annual objectives. The model illustrates the relationship between these themes, the context and our ambition to develop learning opportunities. We recognise digital culture and the need to adapt **leadership** styles at all job levels, championing change and empowerment.

Developing a skilled digital workforce drives our **professional learning** and training offer, equipping people with the skills they need to thrive in a digital world, ensuring that organisations are planning for the digital roles and services that they need now and in the future.

We are data-driven, using **innovative** and sustainable approaches to share our challenges and to co-develop and co-produce solutions in **partnership** with others. We make effective use of technology enabled opportunities to deliver high quality learning experiences.

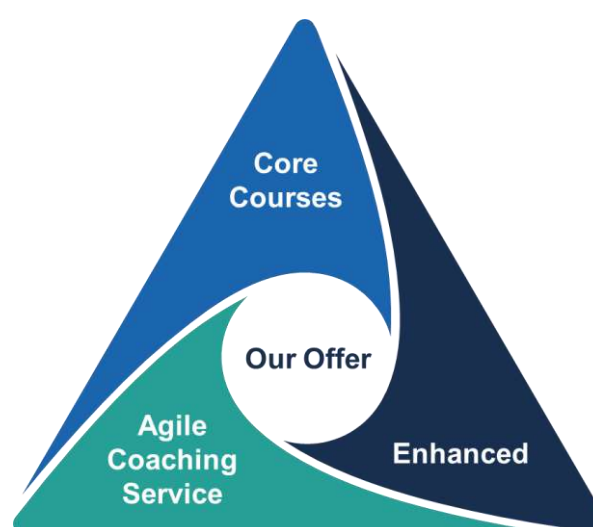
We recognise that digitisation works best when we collaborate at **community**, local regional and national level and when we work across the public, private, voluntary and academic sectors.

In becoming the digital skills provider of choice, the Scottish Digital Academy has delivered and facilitated high quality professional learning and training, with a specific focus on transformation and digital skills.

Our quality assurance and annual monitoring process drives our ambition, informing our objectives and the short, medium and long term outcomes associated with our work. Our thematic priorities are driven by the principles and actions outlined within the Digital Strategy, where the characteristics are necessary for true digital government. As the strategy is jointly owned by local and national government, it will underpin our work for the years to come.

Our offer

Our offer of professional learning during 2021/22 saw a transition away from a cost recovery model to a new target operating model. This new hybrid approach meant that more courses were funded via the Scottish Government and offered at no cost to organisations or delegates. Where there was a larger demand for skills development, we procured courses from a third party learning provider, passing on the savings of procuring once at scale. As this new model evolves, our offer has changed from a one plus one model (courses + agile coaching service) to two plus one model (core courses, enhanced offer and agile coaching service).



An illustration of our professional learning offer.

The primary focus of our professional learning offer is on data, IT operations, product and delivery, quality assurance and testing, technical design and delivery, user-centred design and cyber-security and information assurance. This broadly reflects the DDaT profession, which in Scotland is divided into 7 job families. In addition, we place emphasis on developing leadership capability.

Through programme assurance, we also signpost to existing opportunities offered through our partners and stakeholders.

Core courses are delivered by our team with support from training partners. All our training partners are registered on Public Contracts Scotland (PCS) and are subject to procurement and robust quality assurance processes, ensuring that delegates receive high quality professional learning experiences which are contextualised for the Scottish public sector. For example, where appropriate and

relevant, courses must now include themes such as the Scottish Approach to Service Design (SAtdSD) and the Digital Scotland Service Standard (DSSS).

The **enhanced offer** is based on our core provision and delivered via procurement or third party signposting. This changes on demand and is aligned to the development priorities at any given time. In 2021, we promoted several courses from Microsoft, the Service Design Academy, and The Scottish Business Resilience Centre. By working with our training partners, we facilitated accreditation and certification in Scrum Mastery and Azure Architecture Design.

Agile coaching is delivered by our own team or agile coaching partner at a subsidised rate. This is a custom offer based on a statement of work and may also include bespoke training and support for an entire organisation.

Leadership



Leadership

Leadership exists across all job roles and grades. Leaders in the widest sense understand that people are the drivers and agents of change and that empowerment and coaching is crucial in creating the conditions for transformation.



Developing capability

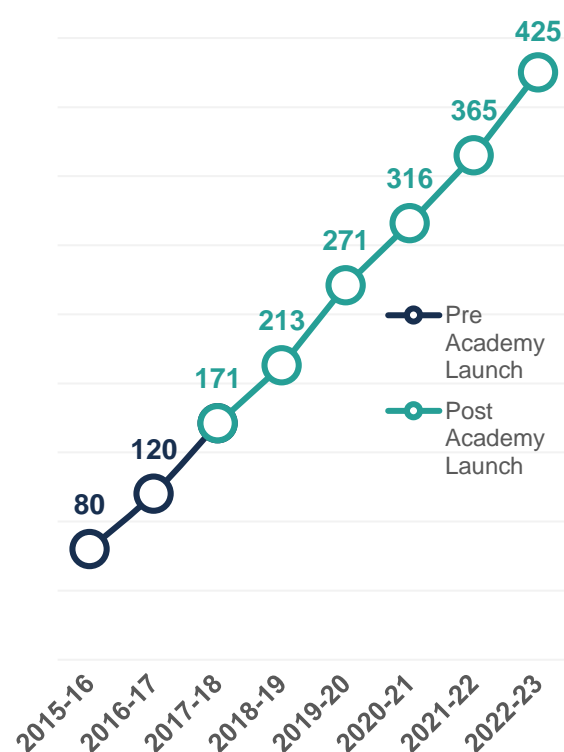
We have strengthened our leadership offer with a focus on building knowledge and confidence and in developing a learning ethos based on trust, honesty, challenge and support; promoting the growth of professional capital and an awareness of agile practices.

We have invested in the development of our expert level leadership programme and in the provision of two new programmes in leading digital transformation and cyber security, aimed at women seeking to upskill and gain experience in leadership roles. Addressing diversity and inclusion remains an important priority for the Scottish Digital Academy and we will continue to explore opportunities for systemic change.

We continue to see growing numbers of delegates participating in leadership programmes that we run. We have now delivered to over 425 senior leaders across the public sector in Scotland, as can be seen in the graph.

We expect significant growth in demand for leadership capability development over the coming months and years. Our research

and engagement continues to identify leadership in a digital context to be a fundamental skill required across the public sector in Scotland.



Increase in leadership programme delegate numbers between 2015 and 2023.

Leading in a Digital World

In October 2021, we carried out research with senior leaders from across the Scottish public and third sectors. We set out to understand more about their professional learning needs, so that we could evolve the existing Digital Champions programme and ensure that it remained concurrent with the needs of delegates in a post-Covid recovery environment.

During programme discovery, several emerging themes became apparent, with a further need to move beyond theories and to consider practical strategies and tools that could support delegates. These themes subsequently informed the structure that now underpins the agenda over six days.

Learning is sustained over a 2-3 month period and covers themes aligned to:

- digital transformation
- systems leadership
- culture and skills
- service design
- agile
- innovation

The mode of delivery was informed by research and includes mixed approaches of in person events and online sessions. When speaking with past delegates, they identified the opportunity to network and meet in person as one of the most valuable aspects of the programme. Not only does it allow people to build relationships, but it also has a positive impact on mental health and wellbeing and for mutual support at a senior leadership level.

There is now a need to explore a complete online programme variant to meet the

needs of those living and working in remote communities and this will be an area of focus in the future.

The new programme aims to build professional capital and capability, developing digital champions and offering senior leaders an opportunity for interactive discussion where they can exchange ideas, discuss solutions to shared challenges and utilise opportunities for collaborative working. It brings together senior leaders from across Scotland to share practical use cases and examples of new technology and approaches to leadership. We're already seeing connections between those attending the programme, with opportunities for further co-construction of solutions and resource sharing to tackle common challenges.

The new programme was launched in March 2022 by the Minister for Business, Trade, Tourism and Enterprise, Ivan McKee MSP, and is supported by Lesley Fraser, Director General Corporate and Geoff Huggins, Director Digital at the Scottish Government.

We launched the latest iteration of the programme with 30 senior leaders. Our second cohort began in July taking the total number of delegates for the year to 60. In total, since 2017 we have supported 204 delegates through the programme and have seen growth each year.

The programme refresh and new content from 2022 has thus far seen positive feedback from those attending.

“The leadership programme was hugely helpful in terms of my strategic understanding of what digital actually was and how it could be used for the benefit of my organisation.”

David Pirie, Executive Director, Evidence and Flooding
Scottish Environment Protection Agency

Empowering Women to Lead

Since 2021, we've sponsored 20 spaces on two leadership programmes on Empowering Women to Lead Digital Transformation and Empowering Women to Lead Cyber Security.

These are unique leadership programmes for women in digital transformation and cyber roles, delivered by Empowering You in association with the Scottish Government and ScotlandIS.

The programmes aim to build a collaborative and powerful community of emerging women leaders in digital transformation and cyber across all industry sectors. During the programme, participants worked individually and collaboratively to:

- Accelerate leadership potential and embrace a 'leader as learner' mindset.
- Explore strategies to understand and engage more effectively with team members and stakeholders.
- Understand and develop their own personal and authentic leadership skills.
- Identify and respond to challenges within the team and organisation.
- Leverage the combined expertise of peers to progress individual and collective growth.
- Collaborate to deliver a team challenge project for the women in their digital community.



Professional Learning



Professional Learning

Professional learning stimulates thinking and ensures that practice is critically informed and up-to-date. It informs and challenges those undertaking training through high quality experiences.



Increasing our reach

Since 2017, we have increased the number and variety of courses and programmes that we offer, with a focus on demand areas such as cloud, cyber security and service design. By offering opportunities for accreditation and certification, we continue to develop pathways which are supported by robust quality assurance processes. We now have a greater focus on depth as well as breadth of learning opportunity. To date, we have delivered 268 professional learning courses and programmes. The use of digital technology and remote conferencing software has increased our reach and scope and last year, we delivered 102 courses which represents a 36 per cent increase from 2020/21.

Despite the challenges presented by the pandemic, we've delivered professional learning to 1,239 people during the past year, which has increased from 601 in 2020/21 and 769 in 2019/20. New courses based on the Scottish Approach to Service Design have proven

popular, with 344 people undertaking Service Design Champions and the Digital Scotland Service Standard Awareness courses. This is a 94 per cent increase on delegates undertaking service design professional learning in 2020/21.

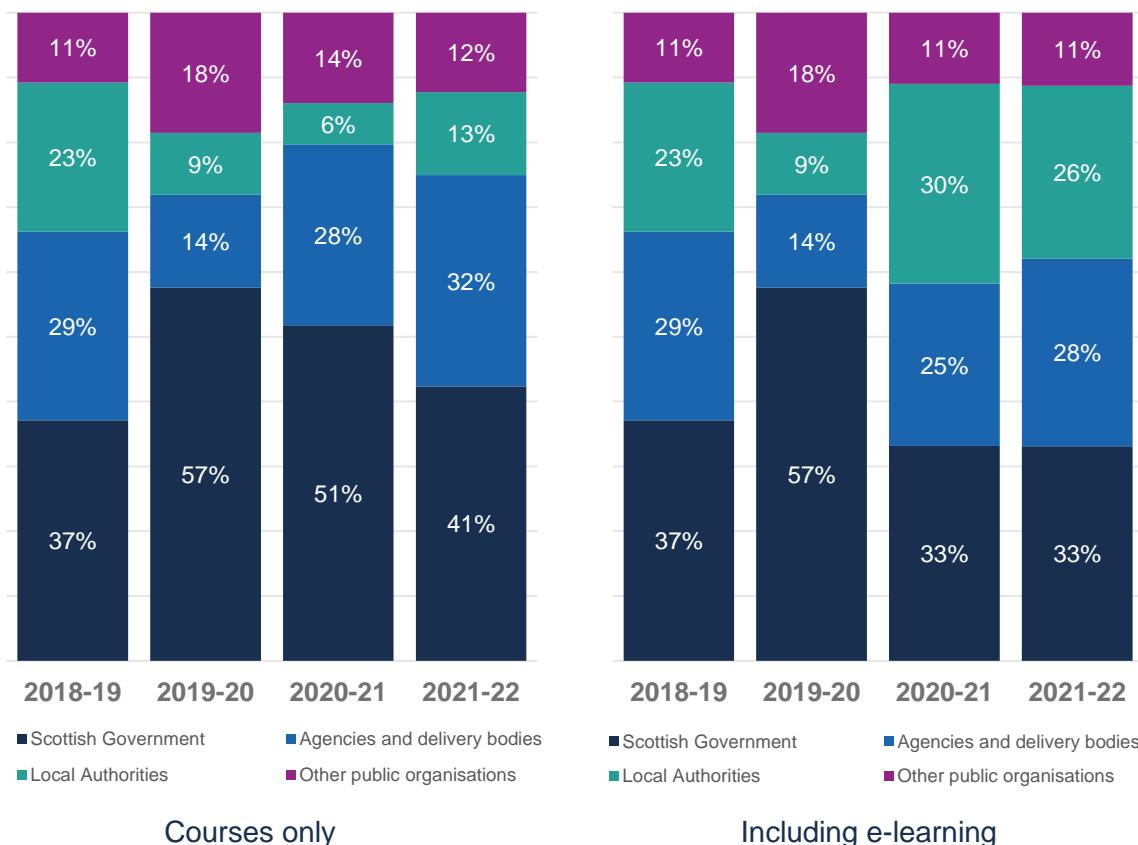
In 2021/22, we saw 454 people engage in agile professional learning, 152 in cloud, 120 in data and 53 in leadership programmes. 110 people attended The First Minister's Digital Fellowship seminar series.

Year	Courses run	No. Attended	e-Learn Sign Up
2018/19	39	504	-
2019/20	62	769	-
2020/21	65	601	25
2021/22	102	1,239	751
Total	268	3,113	776

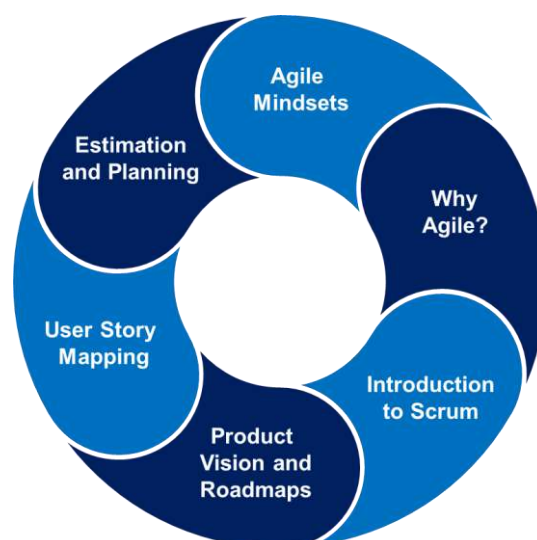
Our users

Our diversity of reach continues to grow. The diagram below illustrates the proportion of users engaging with us from Scottish Government, local authorities, agencies and delivery bodies and other public/third sector organisations. The largest proportion of users continue to be from Scottish Government, with the highest levels of engagement in 2019/20 and 2020/21, at 57 per cent and 51 per cent respectively. Over the same period, the lowest level of course engagement was with local authorities, though this changes when we also include our e-learning offer. For example, in 2020/21 the proportional representation for local authorities was 24 per cent higher when considered. This may be a result of higher demand of self-directed learning to

support professional development and organisational improvement during the pandemic. Given that between 2018/19 to 2021/22 we see a downwards trend in engagement, it's encouraging to see that increase within the last year as a result of our commitment to working with the Local Government Digital Office (LGDO). Users from agencies and delivery bodies remains relatively stable, with exception to 2019/20, where the consequences of work pressure during the pandemic are likely to be contributing factor. At the same time, we began to see an increase in engagement with other public organisations, including those users from charities and voluntary organisations.



Our new courses underpin our refreshed offer of professional learning and are designed to support agile transformation and practice. The course content is aligned to the skills gaps identified via the digital skills survey across the DDaT profession in Scottish Government.



Our refreshed offer

Since the launch of the Digital Academy in 2017 we have expanded the courses available. From only seven courses in 2018, we now offer 27 different courses and programmes across an expanded range of topics. We have significantly expanded our offering in cloud, data, and service design whilst continuing to develop our offering in agile and leadership.

In November 2021, to enable us to build a detailed overview of digital capability, we commissioned a skills gap analysis across the Digital, Data and Technology (DDaT) profession, one of the Scottish Government's largest professional groups, which currently has circa 1,000 members and spans a vast breadth of roles.

In response to our findings, the new and refreshed courses outlined in this report reflect the need for more support in agile methodology and practice.

A follow-up survey will be launched in 2023 to track the progress that has been made in closing our skills gaps and improving capability.

We've now developed a range of new agile courses on Scrum, product vision and road mapping, user story mapping and service design. In addition, we've offered new courses on cyber security, data and cloud.

As our offer increases in breadth, we have started to align our courses to the DDaT Capability Framework skills levels, to ensure depth of learning progression, with a focus on upskilling as well as re-skilling.

To better meet the needs of those accessing our professional learning offer, we sought to identify and develop new courses that would underpin agile thinking and practice whilst addressing the recommendations and actions outlined from the digital skills audit. To address these gaps, we have now successfully piloted six new courses. These courses are the basis of our refreshed offer and they're provided at no cost to the public and third sectors. The courses also act as the foundation for our new Certificate in Agile Practice Programme which will be available from 2023.

“The new learning pathways will help digital professionals identify the best courses to support their development and career progression within Scotland's thriving public sector.”

Roz Britton, Digital Capability and Talent Lead
Scottish Government

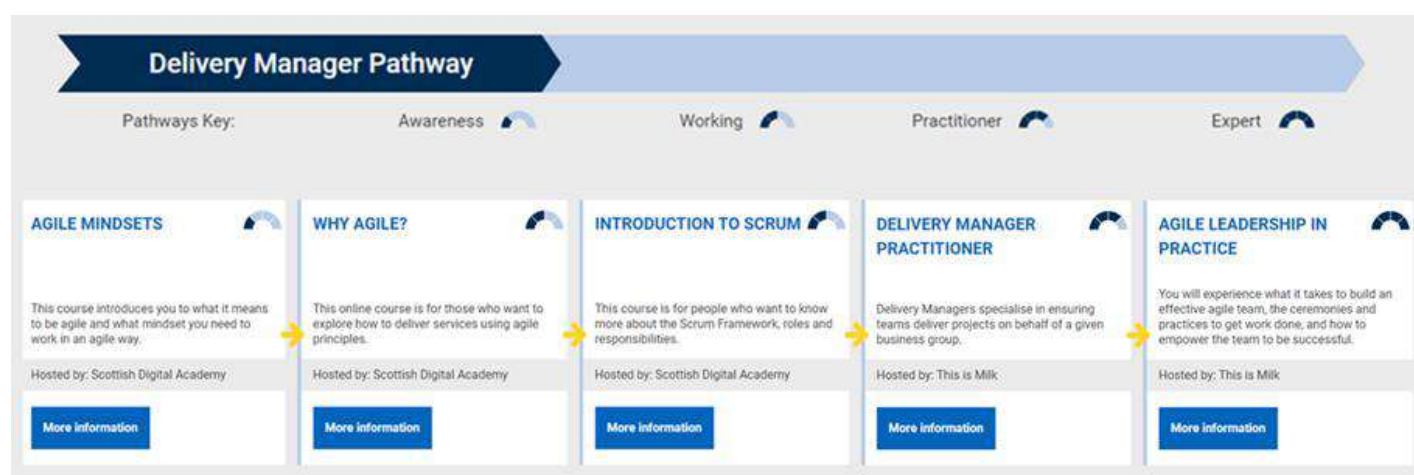
Skills pathways

The development of digital skills, capability and talent can often be a confusing landscape. We have now started to develop a series of pathways and these are central to our strategic model. Our pathways are not intended to be prescriptive, but rather to illustrate breadth and depth of learning and indicate skills progression across DDaT job roles.

Skills pathways are crucial as they provide clarity for those seeking to progress and to develop their knowledge, understanding and skills. They also allow us to identify our gaps so that we may continue to grow and scale up our offer. We have established new pathways on business analysis,

product management and delivery management and we will develop more in 2023. We have also introduced new Masterclass courses for those seeking specialised input across a range of themes, recognising that learning never stops and that there needs to be provision beyond the expert level. Masterclass courses and events are specialised and regularly offered to our Alumni and wider community.

The diagram below illustrates the skills levels associated with our new pathways and the visual pathway as displayed on our website.



DDaT skills levels and progression through the Delivery Manager pathway.

Annual monitoring

We have established an annual monitoring framework, which is intended to quality assure and evaluate the experiences of those accessing our offer and to improve the way that we work in the future. We have started to benchmark our performance so that we can continue to learn, advance and grow as an Academy. This Monitoring Report is the first output from the implementation of our framework.

We conduct a sampling of courses and programmes to ensure consistency of standards. We sample courses that we have procured from another supplier at least once during the contract period. Sampling may involve us requesting evaluation data, other course information or reports from the delivery team. Our training partners inform us of any changes to their learning provision. This may include changes in staff responsible for delivering learning. It is the responsibility of the provider to ensure that course details are correct so that we can update our website.

If a course or programme isn't meeting the learning outcomes we need, we pause delivery to work through content and deliver

collaboratively. Only when we're completely satisfied that the programme meets our quality standards will we resume delivery. Quality assurance is in place for the annual monitoring process itself. The Scottish Digital Academy has established a Stakeholder Forum to act as a point of governance. This involves a supportive arrangement of peer review focused on identifying strengths and areas for improvement across our thematic priorities and annual monitoring activities.

It is expected that any new courses, when on-boarding or going through an initial design phase, will take note of the content of the framework and that course resources and format will allow for collaboration, enquiry, leadership, policy, knowledge exchange and value.

Models of adult learning, or professional learning and development are adopted where applicable. For example, Three Fields of Knowledge (NCSL, 2006), the Glaser Model (1962) and principles of Social Constructivism (Vygotsky, 1962) and Connectivism (Downes, 2006) where we adopt technology mediated online learning.



RESAS Agricultural Analysis Unit, is currently working through many complexities to improve the way our data is collected. The work that The Scottish Digital Academy and their coaching service partner has supported us with has been vital in teasing out the complexities and understanding the scales of work that will be required to be undertaken. The support has also helped provide the tools and methods to clearly state the case for change and agree on a programme of work that can now be undertaken. In particular, the support provided to RESAS has been invaluable in providing staff with the skills to navigate the future work and embed Agile principles into our future activity.

Alastair McAlpine, Chief Statistician
Scottish Government

Course and programme design

Learning with and from colleagues, partners and participants as part of an active learning community is important and it underpins effective professional learning. Learning is an interactive and active process where the learner reflects on professional practice and shares professional learning. They can self-evaluate and consider their own assumptions, context and relationships with others. Conversations are frequent and based on feedback loops between course facilitators, other participants, colleagues, leaders and relevant partners. Knowledge is developed by and with facilitators, learners and the wider professional community.

The Scottish Digital Academy has invested in new approaches to course and programme design to ensure that we continue to provide the most effective, relevant and appropriate experiences.

Our content is delivered in context and is directly applicable within the Scottish public sector. Courses provide opportunities for learners to consider how the learning may be applied within their own context – with alignment to local or national policy or strategy. We extend this approach to our leadership offer. Leaders in the widest sense understand that people are the

drivers and enactors of change for improvement. Professional learning and development is the means by which this is put into action. As a priority, leaders commit to and invest in their own professional learning and development, creating the conditions where professional learning can thrive – space, time, culture and trust. Our courses and programmes promote professional courage and an ethos of leadership regardless of job role or level. Ultimately, they should empower participants to take control of their future needs and training requirements.

Reflecting on professional practice, learning and the learning of learners within context encourages metacognitive knowledge and skills that can also support dispositions around risk-taking, being open to change and ready to innovate. Critically examining a wide range of sources of information to inform knowledge and understanding and the ability to ask questions about impact remains at the core of all our courses and programmes.

As we iterate and improve our professional learning offer, we will consider the latest thinking to inform the design of our courses and programmes and to inform delivery so that our offer remains concurrent and effective.

Agile coaching service

Our agile coaches have engaged with a range of public sector organisations since 2017. We recognise that attendance on a course provides immediate benefit to the individual attending, but there is often a need to support the implementation of new knowledge and skills within context.

We are able to deploy agile coaches to work alongside organisations and teams where agile delivery is immature or where barriers prevent progress. Large scale support has been provided through a programme of work to Police Scotland, Dundee and Angus College and to the National Libraries of Scotland.

During 2021/22, we worked with 7 organisations and more than 80 people via The Scottish Courts and Tribunals Service, Education Scotland, East Renfrewshire

Council, Public Health Scotland, RESAS, Social Security Scotland and across the Scottish Government.

We have reviewed feedback from those engaging with us and there are emerging benefits which are common across organisations seeking to transform and use agile methods for service design and delivery. Notably, there has been an increase in collaboration across teams and between individuals, with an increased sense of purpose and realisation of vision. Communication between teams, with clearer roles and responsibilities is frequently reported and all organisations with whom we've worked tell us that they see greater confidence in planning, implementing and evaluating systemic transformation.

Organisations using our agile coaching service in 2021/22



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Innovation

Innovation

Those engaging with adult learning expect high quality experiences that are commensurate with the latest technologies and with a focus on design standards, accessibility and technological and pedagogical content knowledge. We want to be known not only for what we do, but how we do it. Our learning approach is intended to bring a positive impact - this is our pedagogy.



Our learning approach

The Scottish Digital Academy has explored opportunities to use new and emerging technology which supports our training delivery. We use and inform the latest approaches in adult learning across blended, hybrid, online and in person training delivery. Crucially, we seek to identify and exploit opportunities to improve our business processes and procedures with attention to communication, privacy, data quality and our digital channels.

We responded to the challenge of the Covid-19 pandemic by moving our entire professional learning offer online. This resulted in the use of conferencing platforms and various interactive

technologies to support collaboration and learning. We quickly recognised the need to use a variety of tools and our current use of online technology includes Microsoft 365 and Google Jamboard. We determined that these technologies provide the best experience whilst encountering least difficulties within current public sector technological infrastructure. It's now our ambition to adopt a hybrid approach, returning to in person training and events whilst maintaining the scalability and reach of online delivery. To realise this ambition, we need to innovate and ensure that our delivery remains concurrent with the latest approach to learning.

Our CivTech® Challenge

In 2021, we sponsored a CivTech® Challenge which seeks a technological solution to support the future of immersive digital professional learning. We are now actively engaged in the development of an inclusive and immersive learning application called Neve, that supports approaches to hybrid and mixed modes of learning.

Professional learning is often a one-size-fits-all model. It can leave people excluded from learning or learning in ways that just don't work for them.

Neve, developed by our delivery partner This is Milk, tackles this challenge by embedding learning into the individual's life. It's not a learning management system, but rather a tool to support knowledge exchange. Over time, it gets to know learners and adapts the learning experience to best suit their unique needs and preferences. It gives them the freedom to learn what they want, when they want, how they want. This makes learning a more effective and lasting experience for everyone.

Neve is being developed with inclusivity and accessibility in its foundation. Each feature is designed to make learning easier to digest and retain with a particular focus on the needs of neurodivergent people. From bite-sized content to the use of behavioural psychology, our mission is to make sure that everyone has the optimum

conditions to learn and thrive, regardless of their needs and cognitive differences.

In October 2021, we carried out a closed beta pilot with 20 Business Analysts and feedback was both constructive and positive. Many of those participating in the pilot found that flexibility to address their tasks in chunks was beneficial because they had other commitments over the course of that week. Some had parenting commitments or family care commitments, or they were juggling time between learning and work whilst still addressing challenges presented by the pandemic. During the pilot, we took feedback on the design of the application and on the actual learning experience, which also included one-to-one sessions with the course tutor. This provided an opportunity to ask questions about the course resources and materials and to explore tasks that support learning. It was clear during early discovery and user research that people sought connections with both the trainer and the cohort during their course, and this remains at the heart of the application. Neve allows delegates to learn synchronously as well as asynchronously.

We are now approaching the final stages of this development phase with further evaluation and testing due to take place in 2023. At present, Neve provides an encouraging and exciting opportunity to continue our pedagogical innovation.



Partnership

Partnership

There are many actors and enablers within the technology learning eco-system and we continue to seek opportunities to work together. Partnership is the key to success and it underpins our future impact and outcomes for people in Scotland. Working with COSLA and the Local Government Digital Office (LGDO) is essential in understanding need and driving change.



Collaboration

The Digital Strategy enables a shared vision of a modern, digital and collaborative government, designed around people. To maximise our resource and to realise this ambition, the Scottish Digital Academy leads on strategic themes as well as supporting other organisations where they are better placed to take the lead. Increasingly, and moving towards becoming the skills provider of choice, we are becoming the glue that binds together the wider system in Scotland.

We have identified and worked with others where there are opportunities to enhance education and digital skills and to build a skilled digital workforce through collaboration and co-construction. We work with a range of partners and stakeholders both within the public and third sectors but also within academia and industry.

Since the Scottish Digital Academy was established in 2017, we've delivered a

range of courses on demand, seeking to procure specialist input where needed. Where we do not have the capacity or technical capability to support professional learning, the Scottish Digital Academy uses procurement processes to work in partnership with suppliers and with the Digital, Data and Technology industry. We also value the economic benefit in supporting small businesses and enterprises where appropriate and relevant. Our extended and enhanced offer is built upon high quality learning experiences and we recognise that expertise exists across the entire eco-system. By using industry experienced trainers with experience in the private and public sector, feedback from those accessing our offer has been positive, with evidence that this experience can provide opportunity to unblock barriers and challenges to transformation.

Through these partners, we have also responded to specific needs in relation to

qualification and standards, for example in Microsoft Exam Certification in Cloud Azure, Architect Design, Security and in SCRUM. Typically, courses which fall into our enhanced offer are focussed on data, cloud and cyber security. During the past year, we delivered training in cyber security at a working skill level to 14 people, data leadership at a practitioner level to 65 people and cloud training at a working level to 180 people.

In addition, we have developed a delivery partnership with the Office of National Statistics (ONS) Data Science Campus, to deliver a 3 week online Data Masterclass through the FutureLearn platform. The programme helps senior leaders gain the skills to create and support a data culture in their organisation. It helps government and public sector leaders understand how they can use data to improve the way they make decisions, craft policy, communicate compelling narratives, and apply cutting edge data science techniques. The Data Masterclass has the keen support of Ministers and Senior Civil Service and to date has been delivered to 35 people.

Stakeholder Forum

We introduced a new Stakeholder Forum in August 2021, which acts as a critical friend, steering our ambition and our strategic themes.

Represented by organisational voices from across the public and third sectors, the Forum meets quarterly to discuss the work we've completed to date and any future plans, ensuring that we consider the needs of our users and that we identify

opportunities for partnership. The general purpose of the Stakeholder Forum is to ensure that the Scottish Digital Academy understands the views of key stakeholders. The forum enables stakeholders to influence the delivery and direction of our professional learning, training and coaching offer to ensure high quality, effective services are provided to meet the needs of people in Scotland.

By working in partnership, we bring people together and identify potential duplication in resource and opportunities to support other parts of the technology learning system. The Forum, as a single point of governance, will also play an important role in the future of annual monitoring. We have started to develop a programme assurance model to increase the quality of courses and learning opportunities available and where they are delivered by our partners.

Current membership of the Stakeholder Forum includes:

- Local Government Digital Office
- Police Scotland
- National Records of Scotland
- COSLA
- Colleges Scotland
- Disclosure Scotland
- Education Scotland
- NHS Education for Scotland
- Registers of Scotland
- Scottish Council for Voluntary Organisations
- Skills Development Scotland

Community



Community

Learning with and from colleagues, partners and learners as part of an active community is an interactive and active process that allows people to share their experiences and to challenge their own assumptions, context, knowledge and understanding.



Engagement and outreach

We have built on existing communities by providing frequent learning opportunities. Most of those progressing through our leadership programmes will become our alumni and future ambassadors, helping us to build our capacity and increase our reach. We've made ourselves available where appropriate to support other communities and to facilitate events and conferences.

We've extended our offer to provide information advice and guidance and our team regularly presents at local, regional and national events on the work of Scottish Government and the Digital Directorate, with a focus on digital skills. In addition, our team is available to speak with those requiring support in relation to digital skills, capability and talent. We often engage with the UK Government and internationally.

Alumni and ambassadors

Those attending the Leading in a Digital World programme enter the Alumni community and share their experience with other senior leaders.

We've refreshed our Alumni and now offer more opportunities for professional learning. Our programme of events brings our Alumni together to celebrate, debate and collaborate with senior leaders from across the public and third sectors in Scotland. Our Alumni act as Ambassadors for professional learning, digital skills and agile coaching. Since 2021, we have increased the Alumni membership from 200 to 300 people.

We are in the process of implementing a new collaboration platform to support the Alumni and to encourage co-construction and networking.

“The programme was hugely helpful in terms of my strategic understanding of what digital actually was and how it could be used for the benefit of my organisation. Personally it reset my thinking on how to approach complex issues, start with what the problem is you are trying to solve and do not jump to solutions. It was great to mix with other leaders from wider public sector organisations who would not normally work together - this provided really useful insights and perspectives as well providing a wider network of contacts in our partner agencies. I completed the programme nearly 5 years ago and the learning points I took away from the programme are still very much at the heart of how I work as a strategic leader.”

Leading in a Digital World participant



Looking Forward

Looking Forward

As our portfolio, reach and scope continues to grow, the Scottish Digital Academy has identified a roadmap of activity, underpinned by the objectives set out within our Strategic Business Plan 2021-2025. The thematic priorities will continue to align our vision to allow us to embed our refreshed offer of professional learning whilst seeking to measure the impact of our work in the short, medium and longer term. Ultimately, we wish to understand our contribution and value in supporting positive outcomes against the National Performance Framework.

To support growth and continuous improvement, we have committed to several work streams due for completion by April 2023. These work streams build upon the work already outlined within this report.

Iteration and incremental development of courses and programmes

We have committed to the ongoing development of the Leading in a Digital World programme and are exploring a new hybrid delivery model. In addition, we will introduce a new Certificate in Agile Practice based on a series of short courses and delivered through an intensive week long programme. We are developing a new leadership programme *Fit for the Future* in collaboration with the Office of the Chief

Statistician with the first cohort expected towards the end of 2022.

Expansion of our courses and pathways

We will identify new courses that support professional learning on themes such as AI, cloud, data and cyber and add them to our portfolio. These courses will be available via our website in 2023 and they will inform learning progression via a series of new pathways.

Implementation of Neve

We value the positive impact that immersive and personalised learning can bring to our delegates and we will seek opportunities to further test and use Neve, concluding our CivTech® challenge by supporting hybrid and mixed modes of course delivery.

Establish a new coaching programme

In 2022, we successfully piloted a new short course called Coaching Mindsets. We will commit to further iteration of a DDaT coaching programme by developing coaching opportunities throughout 2023. The first version of this offer will be integrated into the *Fit for the Future* programme.

Implementation of programme assurance

As we grow our portfolio and signpost to learning opportunities provided elsewhere within the technology learning eco-system, we will develop and implement an assurance programme that underpins high quality professional learning experiences.

Developing our partnerships

We already know that we can't realise our ambition by ourselves and we need to continue to work with other organisations. We will further develop our partnerships to either introduce or scale up opportunities and to connect people together, for example by working

with executive agencies and local government.

Evolve our funding model

We wish to make our offer as accessible as it can be to all organisations and to those working across the Scottish public and third sectors. To this end, we will explore funding models and opportunities to reduce duplication and increase our value as set out within the Digital Strategy.

Benchmark our data

We will continue to use our data to inform future decisions and to measure our performance. We will identify a data set and use this to measure progress over time.



Glossary

COSLA	Convention of Scottish Local Authorities
DDaT	Digital, Data and Technology
DSSS	Digital Scotland Service Standard
LGDO	Local Government Digital Office
NPF	National Performance Framework
NTTF	National Transition Training Fund
ONS	Office of National Statistics
PCS	Public Contracts Scotland
SAtSD	Scottish Approach to Service Design
SDA	Scottish Digital Academy
SCVO	Scottish Council of Voluntary Organisations
SDS	Skills Development Scotland
STER	Scottish Technology Ecosystem Review

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