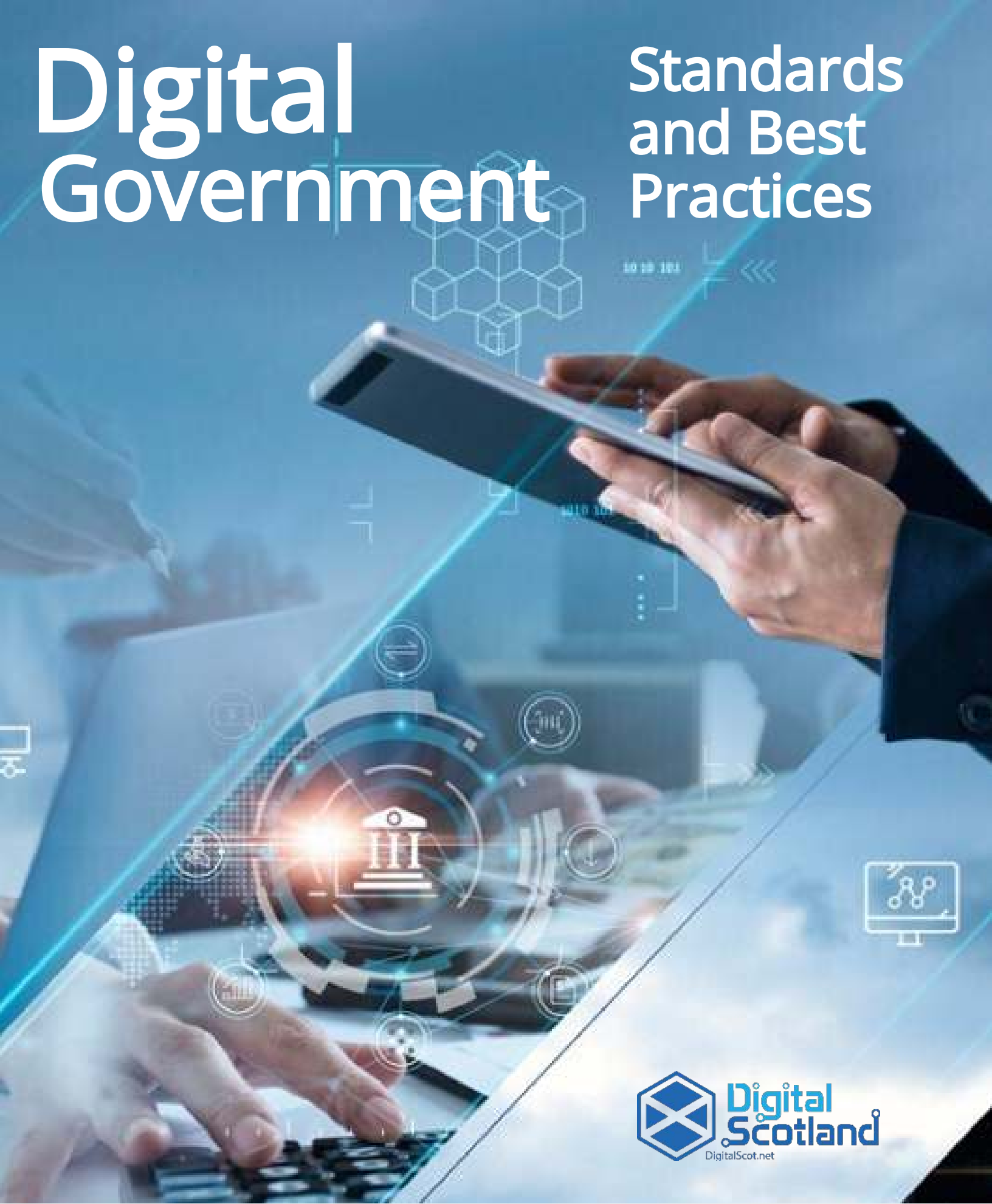


Digital Government

Standards and Best Practices



Digital Government - Foundation for a Scottish Digital Nation

As they describe [here](#) digitally transforming the public sector is central to the Scottish Government's ambition to build a world leading digital nation.

It's defined as one of the component foundations of their [Principles of a Digital Nation](#), a holistic strategy that also encompasses the development of [Digital Education](#) and growing a [Strong Digital Economy](#), through [Digitizing Scottish Businesses](#) and [Supporting the Tech Sector](#).

[Digital Government](#) describes how to become a truly digital nation, the nature of government, at a national and local level, will need to change to meet the needs of citizens:

"The people we serve expect services that are responsive and tailored to their needs and they expect to hold us to account for the quality and efficiency of these services. This requires us to both re-think how we design and deliver services and change the operating model of the organisations that provide them."

Audit Scotland has tracked progress, publishing two reports [Enabling Digital Government](#) and [Digital Progress in Local Government](#), which identified a number of factors and characteristics necessary for true Digital Government, and that are being addressed through the Scottish Government's action plan to:

Digital Government - Foundation for a Scottish Digital Nation

- Design services around the needs of our users and enable users to play a full and active part in the design process.
- Design digital public services with security built in from the outset.
- Adopt a common approach to online identity where personal data is controlled by the individual.
- Place national and local government at the heart of an ecosystem of organisations, across the public, private and third sector, working together in new and different ways to meet public needs.
- Commit to using common digital and data standards that enable us to work across boundaries and deliver personalised and preventive services.
- Use common operating platforms for the processes that are common across Government and enable our resources to be focussed on front line service delivery.
- Be data driven, using data systematically to improve decision making, saving time, money and lives.
- Stimulate innovation through innovative procurement and the availability of non-personalised research data.

Overall [Transforming Government](#) requires a fundamental shift in culture, skills, leadership, service design, process engineering, the use of data, collaboration, and investment planning. It requires leaders with the confidence to move away from the approaches, systems and ways of working that have been successful in the past.

Government as a Platform - Scotland Pioneering State of the Art Digital Services Architecture



Scotland is pioneering the most advanced of public sector technology ideals, that of 'Government as a Platform'.

'GaaP' means a modular, plug and play approach to building digital services, rather than the traditional enterprise monolith approach.

It's a concept first implemented in the commercial sector, by the sharing economy digital giants, like Amazon, Uber and Airbnb. The repeatable secret sauce is the [Platform Business Model](#), described in detail through academic literature and popular business books, such as the MIT book '[Platform Revolution](#)'.

Applying the concept to the public sector is defined as 'GaaP' - Government as a Platform.

Tim O'Reilly coined the concept in [this presentation](#) and documented in [this book section](#), describing how traditional IT for government should become more like Facebook, Twitter and the other Internet pioneers who have been harnessing the evolution of the Cloud to become 'platforms', doing so for government would enable a shared infrastructure that enables more rapid digital transformations.

GaaP in Scotland

Exemplar pioneers of this approach in Scotland include the Scottish Government Payment Service and the National Digital Platform.

Government as a Platform - Scotland Pioneering State of the Art Digital Services Architecture

Payments Platform

As they [wrote on their blog](#) in 2019 the Scottish Government began pioneering a platform model in 2019 for a single Payments system, with a goal of *"Building a single platform also means we can establish standards that will work across government. That will cut down on bureaucracy and needless repetition of work."*

The Payment Platform will act as a broker, abstracting the payment process across and aggregating the services of multiple PSPs (Payment Service Providers), providing a common interface to services such as BACS and Faster Payments, feeding the resulting transaction details into common public sector accounting systems. As new payment methods become available the architecture should make it simple to plug them in.

In January 2022 they [began processing](#) their first transactions, successfully processing the first payroll run for Independent Living Fund Scotland, and by December had [reached the milestone](#) of processing £2m of payments.

National Digital Platform

The [National Digital Platform](#) brings together cloud-based digital components and services. Making it easier to build or enhance technology solutions for the public sector in Scotland.

The NDP provides those delivering technology into Health and Social Care in Scotland access to services and components that make this easier. The technology available on the NDP will improve consistency of access to core digital tools and access to data in the health and care system.

Government as a Platform - Scotland Pioneering State of the Art Digital Services Architecture

- **Reusable components** – Components that developers can use to deliver new technology across health and care.
- **Standards compliant** – APIs provide a standards-based (FHIR) interface to the Clinical Data Repository (CDR).

Example adopters include [NHS Forth Valley](#), where the vaccination data of individuals in Scotland is recorded via the Vaccination Management Tool (VMT) and GPIT systems during each appointment at vaccination centres or clinics.

This data is then stored in the National Clinical Data Store and available for health boards to access via the NDP Vaccinations API. NHS Forth Valley eHealth team worked with NES Technology Service to use this API and put patient vaccination data at the fingertips of clinical staff within their health board.

Cloud First Adoption to Drive World Class Digital Government in Scotland



A key observation and recommendation from an Audit Scotland report on the country's progress building a world leading digital nation highlights the importance of Cloud computing adoption:

"The Scottish Government needs to do more to put the right infrastructure in place to support change. Currently it is not leading by example in the use of cloud technologies, a key part of its strategy."

As they detailed in [this blog](#) the Scottish Government began developing a Cloud Centre of Excellence (CCoE), with aims of helping organisations across the Scottish public sector realise benefits associated with using cloud, providing thought leadership and guidance to Scottish Public Sector organisations as they plan, progress and manage their adoption of cloud services.

Cloud First

This has culminated in establishing their 'Cloud First' policy framework. As the name suggests a requirement that all new IT procurement opts first for a Cloud service if possible.

In 2022 they published [this RFI](#), which began their plans to build a **multi-tenanted public Cloud Platform Service**, with the Scottish Government acting as an exemplar, to encourage and support public sector bodies towards using cloud services and to realise the benefits of cloud computing, in line with the updated Digital Strategy published in March 2021.

Cloud First Adoption to Drive World Class Digital Government in Scotland

“The Cloud Platform Service accelerates the adoption of modern cloud technology in the Scottish public sector, making services secure, sustainable and cost-effective. Using the platform speeds up development, provides access to discounts and prevents duplication of effort.

Four programmes have been running on the Alpha AWS service since May 2022 and additional agencies are onboarding. The AWS service goes live in August 2023, and the Azure service goes into Beta at the same time.”

Best Practices for Adoption and Implementation

This programme is accompanied by a set of best practices for public sector Cloud adoption. The [Benefits of Cloud](#) information will help stakeholders understand the many benefits of using public cloud services.

It provides a high-level overview of the different aspects and uses of cloud, with the accompanying [Cloud Primer](#) offering an introduction, allowing staff from different parts of the organisation to take part in discussions about cloud, and includes seven [Cloud Principles](#) to guide organisations in using cloud appropriately and securely.