The OECD Council adopted on 15 July 2014 the Recommendation on Digital Government Strategies. The Recommendation provides a set of 12 principles structured around 3 pillars. The OECD Secretariat developed a Digital Government Policy Toolkit to support OECD member countries and non-member adhering countries with the implementation of the Recommendation. This practice was submitted by the government of United Kingdom to be considered as a good practice in the implementation of one or more of the principles contained in the Recommendation.

**Description of the practice:**

**Organisation:** Government Digital Service

**Name of the practice:** Gov.UK Verify

**Principles implemented:** Principle 4 – Protecting privacy and ensuring security

**Description:**

**GOV.UK** is a digital identity platform for the UK Public Sector. It provides a secure way for people to prove who they are online and enables users to create a ‘digital identity’ that can be trusted by public or private sector organisations. The Government Digital Service (GDS) has worked to align and map identity standards and ensure that GOV.UK Verify can be internationally interoperable.

**Results**

To date GOV.UK Verify is connected to 18 government services that have a need for identity verification. There is also a growing pipeline for the service both inside and outside of government. There are 2.88 million users of GOV.UK Verify, who have collectively signed in more than 4.68 million times to access one of the 18 services.

**Development**

**Design:**

A secure approach to digital identity is important to prevent identity fraud and cybercrime.
Digital government toolkit

When planning for future threats and risks, strong identity checking protections are an important consideration. The UK government recognised this landscape when it commissioned the development of GOV.UK Verify, a federated digital identity infrastructure. As part of the GOV.UK Verify model, private sector ‘identity providers’ have been certified as meeting government standard. A user of digital public services can choose one of the identity providers to verify his or her identity. The resulting ‘digital identity’ is then maintained by the identity provider and may be used in any subsequent transaction.

Each identity provider has different ways of verifying your identity. The identity provider may ask you some questions or perform other checks using photo identification and financial information before confirming your identity to the government department you’re trying to use (e.g. to HMRC if you’re doing your tax). Using identity providers makes GOV.UK Verify a safer, simpler and faster way of accessing government services online. It’s safe because information is not stored in one place and there’s no unnecessary sharing of information. The identity provider you choose doesn’t know which service you’re trying to access and the government department doesn’t know which identity provider you’ve chosen. It is all done online, without the user having to prove your identity in person or wait for something in the post.

GOV.UK Verify was developed in an agile way, with stages that included discovery, alpha, and beta. The service went into beta in late 2014 and then live in early 2016. During this development and on an ongoing basis since then, GDS has consulted numerous stakeholders including the government departments that use the service and civic liberty and privacy organisations that have been grouped as the Privacy and Consumer Advisory Group (PCAG). However the main stakeholder focus continues to be on the end user and their needs in relation to identity verification.

Testing:

Core to the ongoing development of GOV.UK Verify is placing the citizen at the centre of the service. Understanding their needs and behaviour is essential. A variety of user research activities have been conducted and the insights fed into an agile and iterative delivery process.

As such, we have conducted more than 200 rounds of user research to identify end user needs and to design and improve the service accordingly, with a view to enabling anyone who wishes to use the service being able to do so.

We run regular usability testing sessions and other user research activities such as interviews and remote tests, to determine how best to explain what identity verification is and how to make the user journey as understandable and simple as possible. We also regularly carry out A/B tests to evaluate the performance of the live service at scale.

Implementation:

Tool: The first, and primary, step in the development of GOV.UK Verify was the creation of the standards, certification and trust framework. These were critical for being able to define the level of
assurance the service from the identity providers, would be able to offer. In turn, this underpins the confidence government services and users have in the digital identity on offer. The standards are managed by a team within the GOV.UK Verify programme and continue to iterate based on changing needs and threats.

Following on from the creation and implementation of the standards, the team was able to build the GOV.UK Verify hub, which centralises the transactions between users, government services and the identity providers, and the Document Checking Service (DCS), an API endpoint that allows identity providers to run checks on UK government issued documents against government databases. The hub and the DCS were built in-house using an Agile methodology for product development.

Resources: There are 70 people at GDS that work on GOV.UK Verify but the programme also collaborates with a variety of cross-government groups on certain topics and the wider federation or private sector teams.

Previously audited figures indicate that GOV.UK Verify has cost £54.4m to develop and has saved the UK Government £111.44m. The Government recently conducted an assessment of the costs and benefits of GOV.UK Verify over the period 2016/17 to 2017/18; this assessment has yet to be audited and figures are not yet available.

Diffusion and scaling:

As part of meeting GDS objectives, we share the learnings and methodologies related to GOV.UK Verify both internally and externally. We have published numerous blogs about the platform and its development and we continually engage with departments to ensure they understand the way the platform works and how it can be used.

We also engage with the European Commission and Member States, and with other governments interested in understanding how the platform works. We have presented at numerous events on our approach, methodology and how the service developed. We also participate in international conversations led by the World Bank, the UN, and other multilateral organisations on the subject of identity verification.

In 2012 we joined Open Identity Exchange (OIX), a global, technology-agnostic organisation for identity, which, with our support, established the UK Chapter of OIX to focus on creating a UK identity ecosystem. Through OIX we have collaborated on numerous projects with private sector organisations and other departments, utilising the Agile approach to product development, openness and transparency, and user centric design.

Expansion

GOV.UK Verify provides a piece of the technology that enables digital government transformation. As such, it is being used by UK Government digital services that need to know who the user is.
Digital government toolkit

The programme is also in the process of working with private sector to expand GOV.UK Verify into services like banking, travel and insurance. The key to this expansion and usage is the identity standards that underpin the technology. These standards, which are mapped to international standards, make it straightforward for the technology to be understood and adopted in different sectors. This is turn enables interoperability across borders as well as sectors. The standards that were implemented as part of the Electronic, Identification, Authentication and Trust Service (eIDAS) regulation were built upon the underpinnings of GOV.UK Verify, including the identity standards and the framework agreement with identity providers.

The key challenge for GOV.UK Verify has been to engage with government departments and to convince them to adopt the service. It can be challenging to think of a customer-centric solution rather than a department-centric solution. One of the challenges for the programme was innovating in a collaborative way across the public and private sector. By joining the board of OIX, we were able to drive forward innovation in an open, collaborative and transparent way. Proactive engagement with customers and understanding requirements from services, as well as appreciating the needs and expectations from industry and local authorities, have ensured continuous innovation. The number of services using GOV.UK Verify is growing week by week but scaling the service has taken longer than originally anticipated, reflecting the complexity involved in building and transforming good digital services.

Partnerships:

The Identity Providers: Barclays, Experian, Idemia, Royal Mail, Post Office, Digidentity, GB Group

- PCAG: London School of Economics, Big Brother Watch, British Computer Society, Amberhawk
- Information Commissioner’s Office, Consult Hyperion, NO2ID, Privacy International, Horizon
- Digital Economy Research Institute, UCL, medConfidential, Enterprise Privacy Group)
- OIX
- UK government departments

Lessons learned

There is significant value in working with a range of stakeholders to ensure balanced delivery. This includes engaging with critics and sceptics. A transparent approach to engagement across the public and private sectors ensures that all stakeholders are involved in the journey.
Digital government toolkit

Working to change something that will have a significant impact on people's lives can be a continual challenge. For digital identity, communicating the security benefits is important, particularly the role of these benefits in preventing cybercrime and identity fraud. A secure approach to digital identity is essential to preventing cybercrime and mitigating the risk of a major data breach. When considering and mitigating against future online threats and risks, it is worthwhile to examine stronger identity checking protections for online transactions.

Conditions required:

It is critical to be solving a current service or delivery problem that is well understood, well defined and agreed by stakeholders. It must be a problem that requires a technology innovation to solve it and for which the answer won't be obvious or already available in the market. Ideally other organisations will be able to benefit from this challenge being solved so they too can use the solution. In the case of digital ID, having this clear vision has set a strategic direction for the government, which has unlocked a whole new market of identity services. There is real value in government showing leadership in the areas of standards and product development, as well as fostering a culture of collaboration. In the UK this has enabled successful cross-over with other sectors, for example, digital identity has a role in facilitating compliance with Know Your Customer (KYC) and Anti-Money Laundering (AML) regulations.

Formal Evaluation:

GOV.UK Verify has been subject to several evaluations over its lifetime. It has had several reviews from the Infrastructure and Projects Authority (IPA), which is the UK Government’s centre of expertise for infrastructure and major projects. Its funding and economic value have been assessed by Her Majesty's Treasury, as well as a number of 3rd party external consultancies. All spend and savings are audited before being reported.

Additional information:

Successful innovations need a strong team who can build confidence in the idea, with markets, users and other parts of government. The key to this is getting the upfront investment right, both in terms of strong senior support and enough money to allow the idea and team to move quickly. A clear policy will underpin the vision, which is outcome-focused ideally, rather than specifying solutions, to allow the team or the market to innovate in the space. The policy will add enough support to make it easy for people to invest time and money in the idea but not be so prescriptive that it stifles or curtails how the idea progresses.