

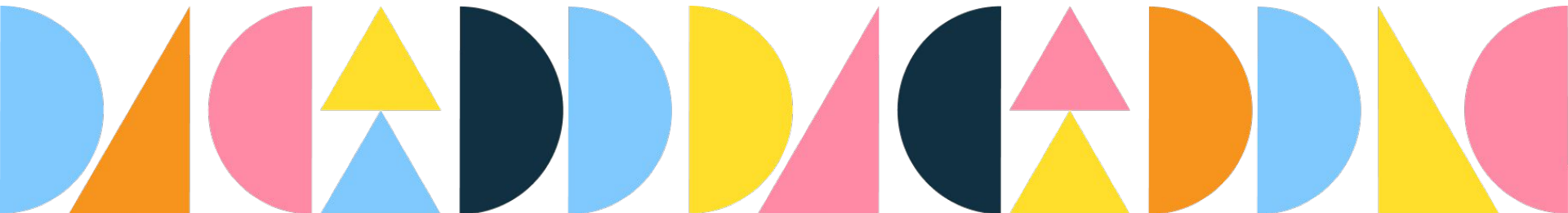
PUBLIC | G-CLOUD 15

Cloud-based Innovation Sandbox
Testing

PUBLIC



About PUBLIC



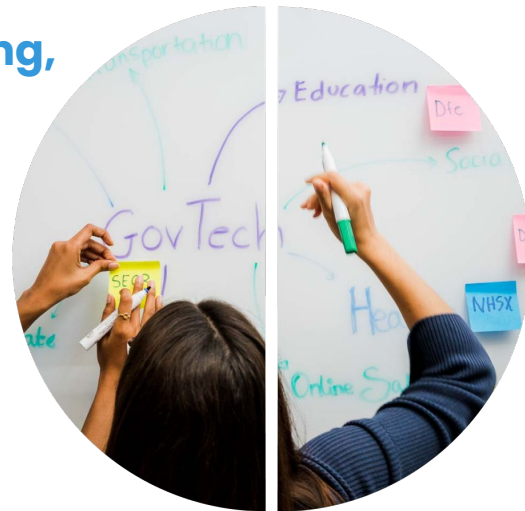
Our Mission | Why do we exist?

PUBLIC is a **digital transformation partner committed to helping the public sector turn innovative ideas into practical solutions.**

Our mission is to **help the public sector deliver outstanding, digitally-enabled services for citizens.**

We exist to help build a public sector that:

- Leverages **new technology to deliver better societal outcomes**
- Activates an **empowered, digitally-equipped workforce**
- Thrives on its own as an **innovation powerhouse** in its own right



Our Approach | The transformation life cycle

We categorise the **digital transformation life cycle** into four distinct stages and we work with our clients to provide them with the specialist support, expertise and solutions they need at each stage.

This allows us to get our clients from **'What problems do we have?'** ...

...all the way to **'We have the technology, skills and organisational approach to solve existing and emerging problems in innovative ways'**.



Our Expertise | Where do we focus our work?

Our 6 Areas of Expertise built by deep experience, proprietary methodologies and proven success



Local Government

- Digital & Data Strategies
- Training for Officers & Members
- Leadership & Technical Advisory
- Spend Analysis & Benchmarking



Security & Online Safety

- Digital Policy Advisory
- Regulatory Design & Implementation
- Digital Product Design
- National Security Solutions



Digital, Data & Technology

- DDaT Strategy & Transformation
- Application & Platform Development
- Data Science & Engineering
- Responsible AI Advisory



Commercial, Spend & Impact

- Procurement & Commercial
- Finance & FinTech
- Monitoring & Evaluation
- Sustainability & Social Value



Open Innovation Programmes

- Challenge Programmes
- Startup Accelerators & Boot Camps
- Innovation Grant Management
- Startup Events & Engagement



Learning & Workforce Transformation

- Learning-Oriented Discovery
- Transformation Learning Programmes
- Targeted Digital Upskilling
- Executive Coaching & Placements

Our Team | Leadership

A team with unrivalled experience & expertise



Ryan Shea

Co-Managing Director

- 15 years of technology, strategy, and public sector expertise across both the US and UK
- Ex- Monitor Deloitte, London Business School MBA.



Johnny Hugill

Co-Managing Director

- 10+ years delivering digital transformation in the public sector
- Leader in public procurement and finance reform
- UK Government Procurement Expert Group - Member



Richard Llewellyn

Chief Technology Officer

- 10+ years of technical leadership, assurance, and advisory across the public sector
- Leader in scaling product teams in both startup and enterprise contexts

Our Clients & Partners | Who do we work with?

Central Government



Ministry
of Defence



Ministry
of Justice



Crown
Commercial
Service



Foreign &
Commonwealth
Office



Department for
Business & Trade



Cabinet Office



Ministry of Housing,
Communities &
Local Government



Department for
Science, Innovation,
& Technology



Department
for Transport



Department
for Culture
Media & Sport



Department
for Education



NHS
England

Local Authorities



GREATER
MANCHESTER
COMBINED
AUTHORITY



Llywodraeth Cymru
Welsh Government



City of
Westminster



TRANSPORT
FOR LONDON



Public Agencies



Information Commissioner's Office



Office for Product
Safety & Standards



Geospatial
Commission



Health
Innovation
Manchester



The
Health
Foundation



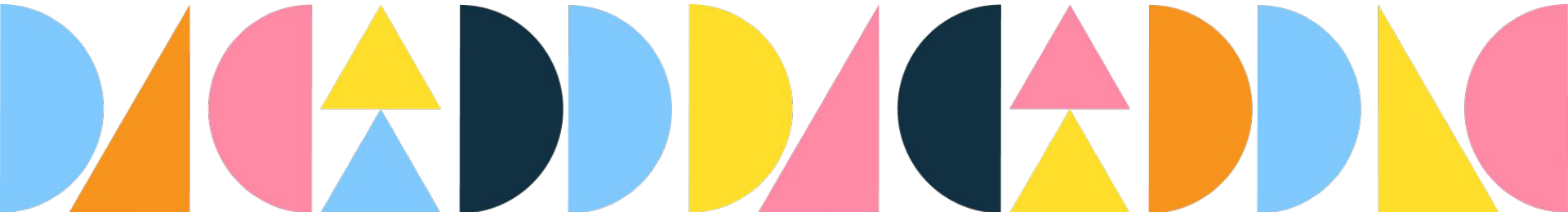
Equality and
Human Rights
Commission

Private Sector



Service Offering

Cloud-based Sandbox Development



Cloud-based Sandboxes



What: An innovation sandbox is a cloud-based technical environment that allows live, time-bound testing of technology solutions (in particular AI/ML solutions) under the oversight of a regulator or public body. Novel products, technologies, and business models can be tested under a set of rules and supervision requirements with the appropriate safeguards.

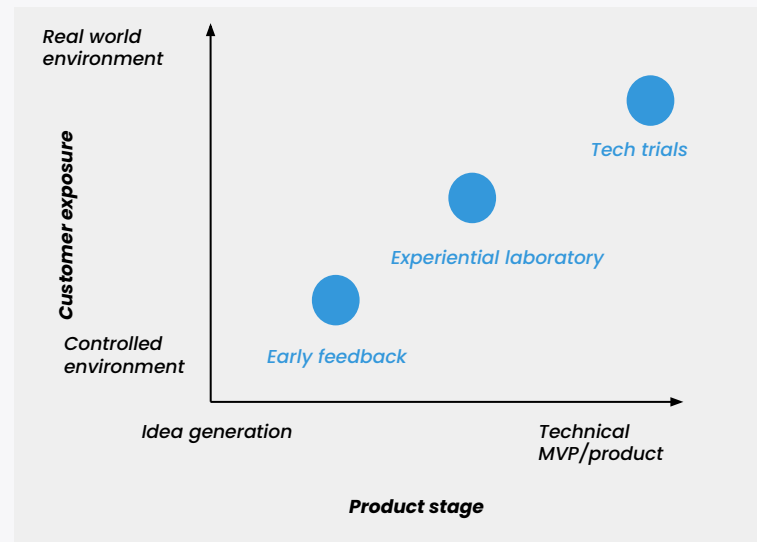


Why: Across over 60 global jurisdictions, public sector bodies use innovation sandboxes to gather technical insights into emerging technologies to inform risk assessments and policy, while allowing for controlled and supervised deployment of technology to users.

PUBLIC's credentials as a trusted innovation partner to 6+ regulators and 10+ Government entities, along with our technical delivery and AI evaluation capabilities makes us best placed to support in the design, development and deployment of cloud-based innovation sandboxes.



How: PUBLIC has an end-to-end sandbox service which supports clients from objective setting and design, through to building and evaluating sandbox performance post-build.



Variations of innovation sandbox environments

How Cloud-based Sandboxes can support the UK's pro-innovation approach to regulation

Industry Innovation

Sandboxes foster innovation by providing a safe space for businesses to experiment with new technologies and ideas without fear of regulatory repercussions. This encourages entrepreneurship and creativity in frontier markets.

Compliance and Enforcement

Sandboxes also provide an improved process for testing whether AI and emerging technology solutions are compliant with privacy and ethical standards. Taking place in a controlled environment, it safeguards users and ensures proper testing has taken place before deployment

Learning and Market Intelligence

Regulatory authorities benefit from sandboxes by gaining insights into disruptive technologies and new business models. This firsthand experience helps regulators understand the potential risks and benefits associated with new innovations, and enables co-creation of new effective regulatory rules, guidance and policies in the future

Likely customers

- *Department of Science, Innovation and Technology (DSIT) to foster innovation and stimulate strategic sectors, such as online safety tech, AI assurance and age assurance.*
- *Digital Regulatory Cooperation Forum (Ofcom, ICO, FCA, CMA) to test RegTech solutions*

Cloud-based Innovation Sandbox

Features:

- **Programme Design:** PUBLIC works with the customer to define the objectives of the innovation sandbox, including the identification of high-impact use cases, establish programme governance and roadmap, and determine an ongoing monitoring and evaluation (M&E) approach.
- **Use Case and Theme Selection:** Leveraging our expertise in emerging technologies such as AI, Age Assurance, and safety technologies, PUBLIC prioritises use cases for sandbox testing for a particular time-bound cohort.
- **Cohort Selection and Communications:** PUBLIC's position as an industry and ecosystem leader, coupled with our proprietary database of 4000 startups, enables us to engage the market and select suitable technologies effectively for sandbox testing.
- **Sandbox Deployment:** PUBLIC will collaborate with clients to develop, acquire, or re-use a cloud-based sandbox, considering use case specificity, value for investment, and design requirements.
- **Scale and Maintenance:** Following Government Digital Service (GDS) lifecycle principles, we will continuously monitor performance and usage, optimising features for enhanced performance. We will partner with clients to scale and iterate the cloud-based sandbox as needed.
- **Evaluation:** Drawing on PUBLIC's expertise in evaluating digital products, we will monitor cloud-based sandbox usage and evaluate performance and outcomes effectively.

Benefits:

- Ensure the programme is set up for success, with clearly defined, measurable objectives.
- Facilitate a targeted approach to selecting the most impactful use cases and technologies.
- Generate enthusiasm and engagement from high-value businesses.
- Allow for the consideration and deployment of suitable technical options tailored to specific needs.
- Ensure controlled scaling, validating the riskiest assumptions.
- Establish a robust business case for future utilisation of the cloud-based sandbox.

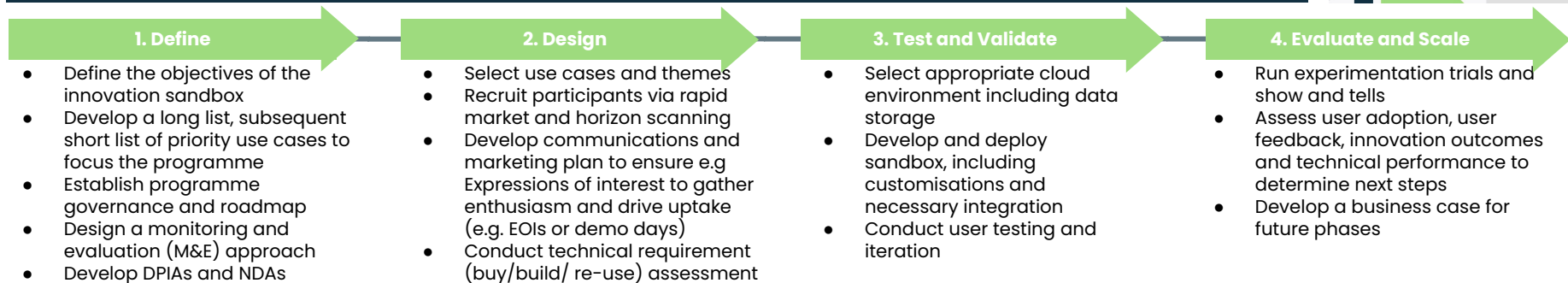
Methodology: Innovation Sandboxes

PUBLIC

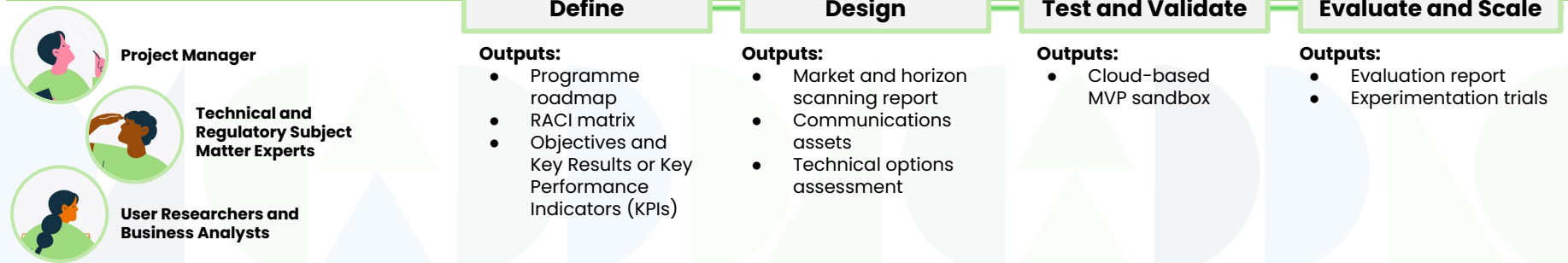
PUBLIC collaborates with regulators and public sector bodies from the outset, to chart and establish an appropriate strategy for setting up and maintaining an cloud-based innovation sandbox capability. We take into account various factors (such as desired outcomes, budget, past customer experience, and team skill sets) and work closely with clients to co-design and deliver a fit-for-purpose sandbox programme.



Methodology

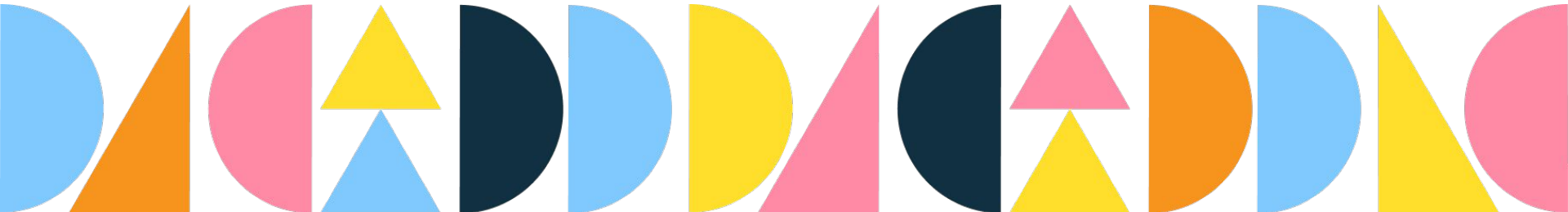


Resourcing & Output



Relevant Experience

Cloud-based Sandbox Development



Case Study: Online Safety Data Initiative – Product Evaluation

PUBLIC

What was the challenge?

PUBLIC was commissioned to deliver a 15-month innovation programme to test methodologies to facilitate better access to higher quality data and resources to support the development and testing of online safety tech solutions.

Based on 200+ user interviews and 3 roundtables during discovery, the team identified a major pain point around inability of government to benchmark and evaluate AI/ML safety tech solutions. PUBLIC was commissioned to develop a cloud-based AI evaluation sandbox and test dataset, alongside standardised product evaluation criteria and metrics.



Department for
Digital, Culture,
Media & Sport



How did we solve the problem?

Through a five-step process, we developed a cloud-based sandbox for safety tech AI product testing, focused on a government priority use case of text-based AI models for moderating suicide and self-harm. This allowed the UK Government to compare performance of AI solutions and understand key risks for deployment.

As a result of the project, we were able to demonstrate a working approach to product evaluation to inform a future online safety regulatory regime and delivered a working TRL4 product evaluation platform to DCMS for review and testing with pilot users.

What did we deliver?

1. Define

- Conducted **in-depth desk research** into evaluation frameworks
- **Defined project scope** and mapped evaluation use cases
- **Longlisted** relevant evaluation criteria and metrics
- Gathered user needs from **35+ research interviews**

2. Design

- Conducted **sandbox technical scoping** and data governance
- Developed DPIA
- Developed v1 technical **evaluation framework** and **qualitative assessment** framework
- Developed **implementation plan** & test dataset collection

3. Test & Validate

- Conducted **user testing** on evaluation framework draft criteria & metrics
- **Conducted workshop** to test qualitative assessment framework
- Built sandbox MVP on off-the-shelf, cloud environment
- **Gathered and labelled test data**

4. Refine

- **Refined evaluation frameworks** based on user feedback
- Developed **pilot selection process** and identified 3 pilot firms
- **Developed MVP2 sandbox** (TRL4) based on pilot user feedback

5. Scale

- Developed **user guide and code of conduct**
- Developed **incident management and data breach plan**
- Developed **recommendations for scaling to Live** as part of a final report

Email ryan@public.io to learn more