CATAPULT
Connected Places

Discovery insights

Beyond the testbed

From successful innovation trials to wider adoption



Overview

Across transport and infrastructure, testbeds, trials and innovation programmes provide valuable opportunities to demonstrate new solutions in real-world environments.

But a successful trial does not automatically lead to adoption. As an innovation moves beyond one trial environment, it encounters new organisations, context and decision-makers – each with different questions, requirements and levels of risk.

Our discovery phase explored the gap between successful trial and wider adoption.

It revealed a challenge that goes beyond any individual trial:

How can trialling generate not only proof that an innovation works, but greater confidence in the decisions that come next?

This report shares key insights from the discovery and explores what they could mean for the journey from trial to adoption.





Four insights from trial-to-adoption journey

We spoke with innovators, testbed operators, buyers and wider experts, alongside desk research on innovation trails, evidence and adoption. Four insights stood out.

1. A successful trial is only one step towards adoption

A trial may demonstrate that an innovation works and can address a particular challenge. But adoption can depend on operational, commercial, procurement and assurance decisions - each requiring confidence in different things.

Trials can prove performance. Adoption requires confidence across a wider set of decisions.



2. Evidence does not automatically travel

Evidence generated in one environment may remain valuable elsewhere, but its relevance cannot simply be assumed. A new location, use case, sector, configuration or regulatory requirement can create legitimate new uncertainties. At the same time, innovators can find themselves demonstrating similar capabilities repeatedly as they move between opportunities.

The question is what can be carried forward and what genuinely needs to be demonstrated again.



3. Evidence is only useful if decision-makers can trust it

For another organisation to act on evidence, it needs enough context to understand what the evidence proves, how relevant it is to their organisation, and whether it can be relied upon. Context, provenance and credibility matter alongside technical results.



4. Trial evidence is not always designed for the decisions that follow

The people delivering a trial are not necessarily those making later investment, procurement, assurance or deployment decisions.

If those requirements emerge only after a trial finishes, a successful trial can still lead to new questions and new evidence requirements.

The challenge is not just how we trial innovation. It is how the evidence generated through a trial can better support the decisions that lead towards adoption.

Proving an innovation works is only part of the journey. What happens to that evidence next matters too.



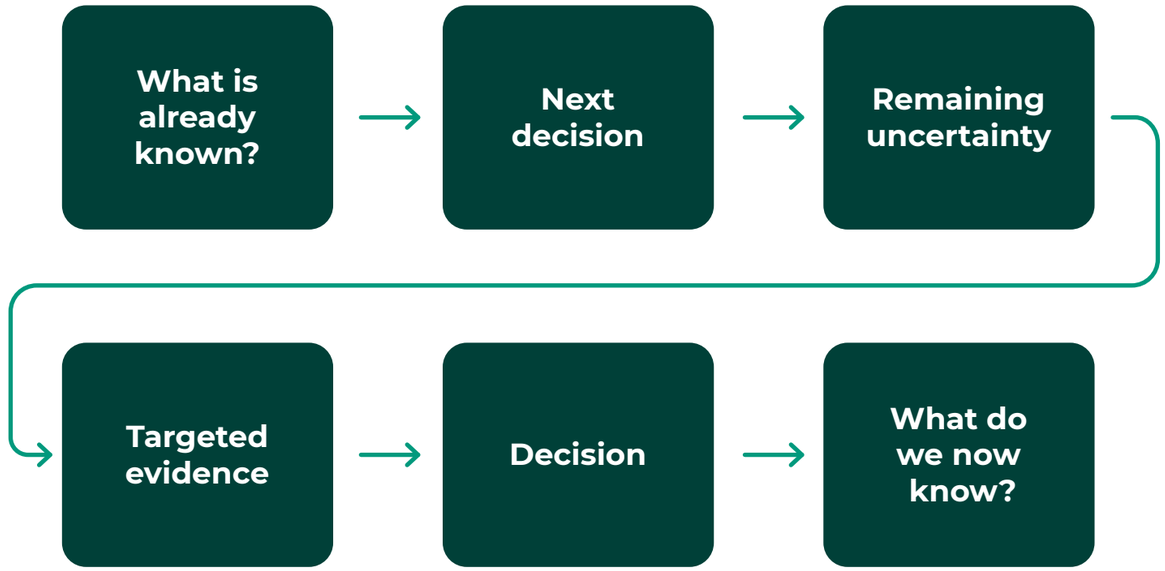


What if every new trial started with what we already know?

Today, an innovation journey can look something like:

A successful trial generates knowledge that a solution works within a specific context. But when the innovation encounters a new buyer, environment or use case, new evidence requirements can emerge and parts of the trial journey may begin again.

But what if trialling and adoption were treated less as separate stages and more as an accumulating journey of evidence and learning?



In this model, previous evidence is neither automatically accepted nor automatically discarded. Instead, it provides a starting point for understanding what has already been demonstrated, what remains relevant and what the next decision-maker still needs to know.

What if every trial made the next adoption decision easier?

Three shifts worth exploring

Our discovery research suggests three shifts that are worth exploring with the organisations that generate, use and rely on evidence.

Shift 1

From repetition to accumulation

Existing evidence and learning could provide the starting point for the next test, helping identify what remains uncertain and where new evidence is genuinely needed. The objective is not to eliminate revalidation, but to make better use of what has already been learned.

Shift 2

From evidence to trust and decision-making

Evidence becomes valuable when someone can use it to make a decision. That means considering not only what evidence should be generated, but how it is captured and communicated. If done well, future decision-makers can understand evidence context, provenance, credibility and limitations.

Considering downstream decisions earlier could make the evidence generated through trial more useful beyond its immediate context.

The goal is the evidence that helps the right people make decisions with greater confidence.

Shift 3

From individual trials to connected learning

Testbeds and innovation programmes generate valuable knowledge. But their value does not necessarily have to end when an individual trial finishes.

Evidence and learning generated through one programme could contribute to a wider body of knowledge, helping subsequent buyers understand what has already been demonstrated and where uncertainty remains.

This raises a different measure of success:

What if the success of a trial was measured not only by whether it was completed, but also by whether the learning it generated helped an innovation progress towards adoption?



Where are the boundaries?

There is an important counter-question: where should evidence not travel?
This is not an argument for testing once and trusting the evidence everywhere.

We have seen in the discovery phase how evidence is not suited to every context, and how a different set of circumstances can influence the need for further testing or independent assurance.

There are also important boundaries around intellectual property, commercial confidentiality, data ownership and permissions. Making evidence more useful does not mean making proprietary information universally accessible.

Questions also remain around liability, ownership, independent assurance and who determines whether previous evidence is sufficiently relevant to a new decision.

Any future approach, therefore, needs to balance two objectives:

1. Make better use of what is already known.

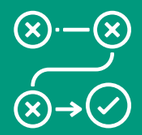
2. Preserve the testing,revalidation and assurance genuinely required for the next context.

Where does the journey break down for you?

No single organisation controls the journey from trial to adoption. The opportunity and the questions it raises will look different depending on where you sit.



Innovators
Could building on what has already been demonstrated reduce unnecessary repetition and create a clearer path towards new buyers and markets?



Testbeds and innovation programmes
Could trials be designed with greater consideration of the decisions and evidence requirements that follow?



Procurement and commercial teams
Could earlier involvement make relevant evidence easier to use when innovations reach formal purchasing processes?



Government and funders
Should the value of innovation programmes include not only the trials they enable, but the learning they create and their contribution to subsequent adoption?



Regulators and assurance bodies
Where could previous evidence appropriately inform future decisions, and where must revalidation remain essential?

These questions need to be explored collectively by the organisations that test, develop, trial, buy, fund, procure and assure innovation.



How to get involved

The discovery phase has helped build a clearer picture of the challenge. The next step is to test these ideas with the wider ecosystem and explore what could work in practice.

We are interested in hearing from organisations that:

- have experienced repeated trialling or assurance requirements;
- have found it difficult to use or trust evidence generated elsewhere;
- have experience of approaches that successfully carry evidence or learning from one context to another;
- want to explore how testing could better support adoption; or
- can contribute challenges, use cases or opportunities to test these ideas.

We want to understand:

- What would make evidence generated elsewhere credible enough to inform your next decision?
- When should previous evidence be carried forward and when the new trial is required ?
- Where does your organisation enocounter barriers on the trial-to-adoption journey ?
- What approaches have you seen that already work well?

Share your experience

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Get involved

Transforming infrastructure challenges into **opportunities for innovative businesses**

We use our networks, technical expertise, and government and industry partnerships to strengthen routes to market and unlock trade and investment opportunities in transport, construction and data infrastructure, allowing businesses to start, scale and stay in the UK.

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Connected Places Catapult is part of the UK's Catapult Network, connecting businesses with the UK's research and academic communities to accelerate innovation.

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