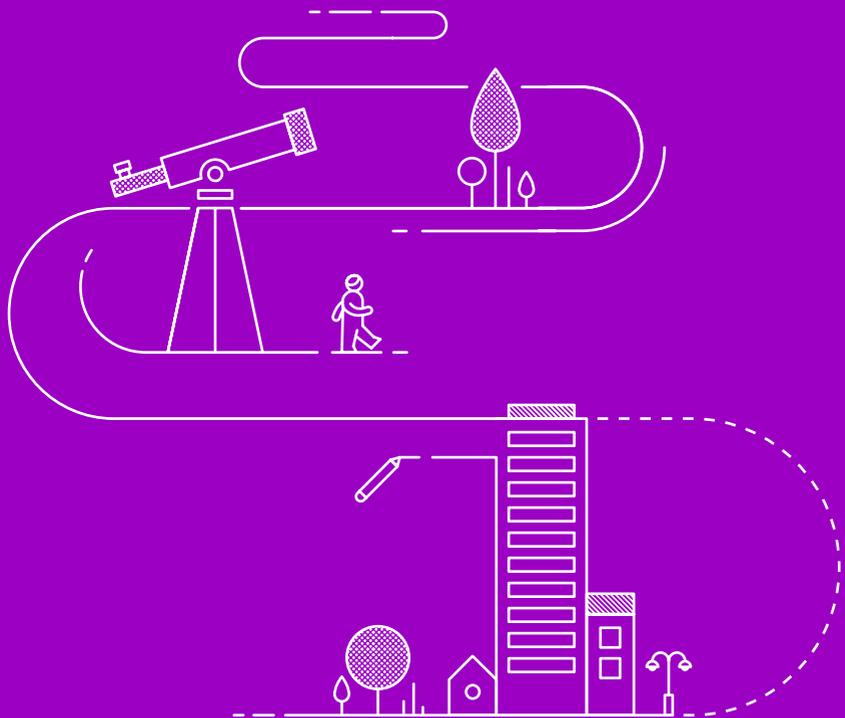


# A compendium of innovation methods





# A compendium of innovation methods

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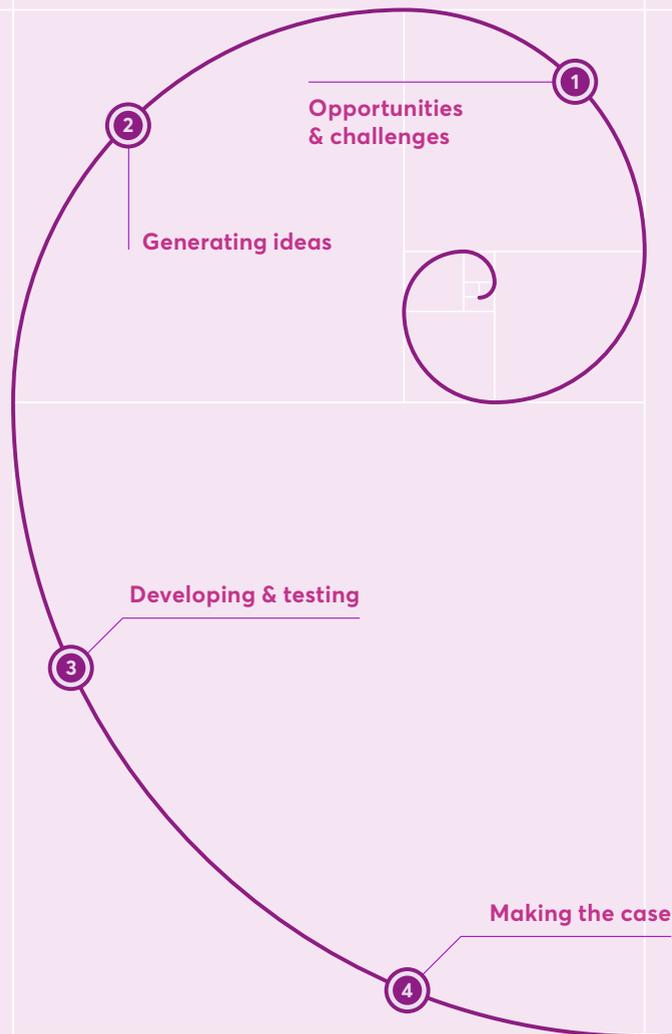
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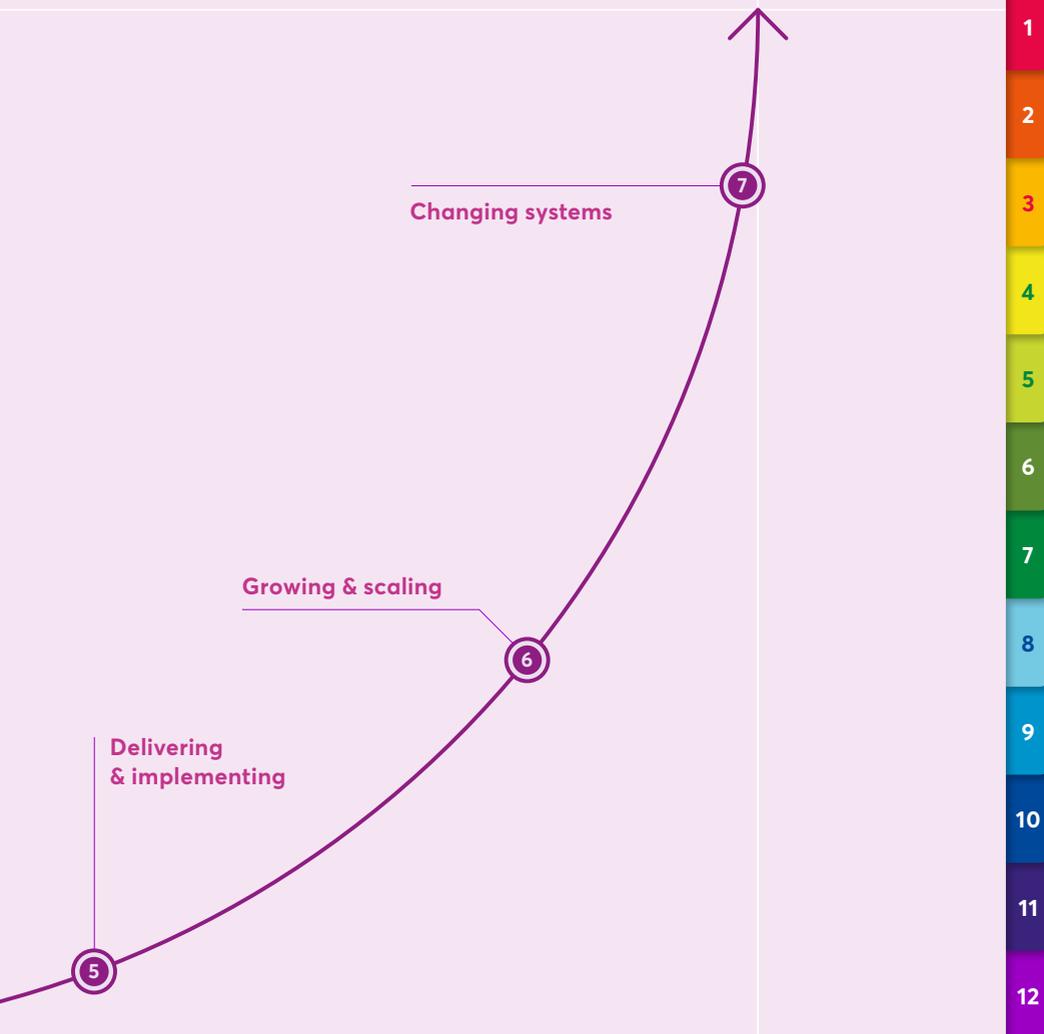
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## The innovation spiral



There are many ways to help bring good ideas to life. Nesta works to uncover, analyse and test new ways of supporting innovation from across sectors and around the world. These techniques, tools and processes are collectively known as innovation methods.

Although every innovation is a complex story of feedback loops and jumps, there are various structured stages that most innovations pass through. We represent these in the innovation spiral.



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## An introduction to innovation methods

**The next generation of innovators will have a vast new range of opportunities compared to the last.**

Much of 20th century innovation, from transistors and integrated circuits to polycarbonate and neoprene, was driven by big laboratories in governments and big firms like Bell Labs, DuPont, or Bayer. Innovation was seen as the preserve of science and technology.

The digital revolution transformed how innovation happens. It became more open and collaborative, spurring a plethora of new business models and services across industries – today epitomised by the 'platform' innovation at the heart of companies like Facebook and Apple.

Now, the advent of the big data era and the mainstream exploitation of artificial intelligence is recasting innovation processes again, with blockchain and driverless car testbeds just a hint of what's to come.

Yet while innovation has changed dramatically, government policies and support for it have sometimes seemed stuck in a 20th century model of innovation.

For the last decade or more, Nesta has been searching for ways to support innovations that exploit these new trends, aiming to spread the capacity for innovation and apply it to the problems and communities most in need.

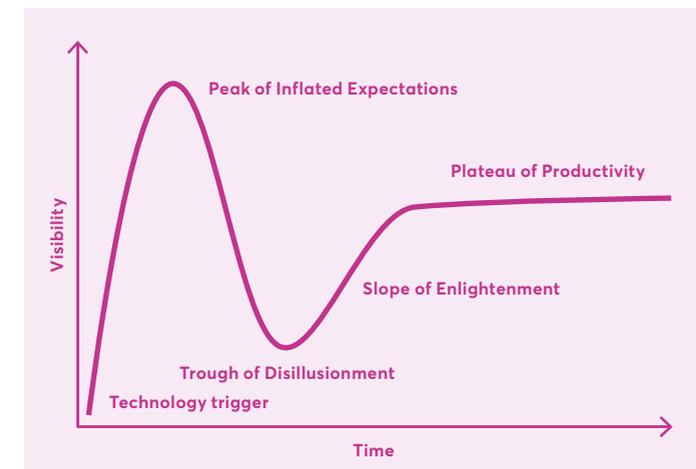
Featured in this compendium are just some of the innovation methods we have analysed, developed, tested and spread over the last decade. Some, like seed accelerator programmes, we have invested in and studied. Others, like challenge prizes, standards of evidence or public sector labs, we have developed and helped to spread around the world.

In some cases – for instance prototyping – we helped to bring established design techniques to new users in the public sector and civil society. In others, like People Powered Results, we help organisations and frontline workers across the UK to adopt the approach. With other more emergent methods, such as innovation mapping and anticipatory regulation, we are helping shape entirely new ways of supporting innovation in the economy and society.

Nesta's approach to innovation methods combines research, practice and learning. We often start off with a research or observation phase, and then use the method in our own work, building evidence and understanding; and subsequently either turn this into a standalone team or generate materials to make it easier for others to adopt the method. This continuous cycle of understanding, doing and learning deepens our knowledge of the method and enables us to spread its benefits – for example to other innovation agencies, foundations or governments.

As we do this, we try to smooth the wilder swings of innovation hype. In the well-known technology Hype Cycle modelled by Gartner, new technologies progress through various stages: from discovery, to inflated expectations and then disillusionment before reaching enlightenment and productivity. The same can be said of innovation methods. This year's hot new approach can rapidly become last year's fad, leading to cynicism.

**Fig. 1**  
The Hype Cycle Model:  
[gartner.com](http://gartner.com)



Through our work, Nesta spots emerging trends in innovation and support for innovation, and assesses their potential and relevance. At this stage, we tend to be encouragers – testing and examining. As interest overshoots with inflated expectations, we cast a critical eye over the wilder claims of proponents and introduce a note of caution about when particular methods will and won't work. In any period of disillusionment, we remind people of some of the enduring use cases of certain approaches and point them towards quality examples. We support the mainstreaming of methods throughout these stages through research and analysis, practice guides, toolkits, learning programmes and building communities of practice.

This compendium brings together some of our experience over the years. Each section gives a simple introduction to the method and describes Nesta's work in relation to it. In each case we have also provided a link to further relevant resources and inspiration on our website.

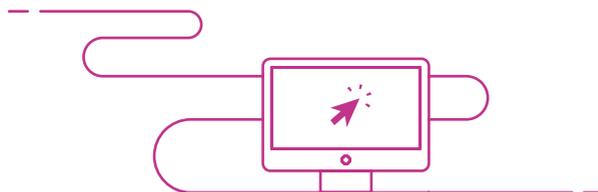
We're continuing to research, examine, explore, develop and test new methods of innovating and supporting innovation. Get in touch with [innovation-policy@nesta.org.uk](mailto:innovation-policy@nesta.org.uk) to suggest new ideas for exploration or collaboration.

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**Section 1**

# Accelerator programmes

Accelerators provide intensive and time-limited business support for cohorts of startups, aiming to get them ready for investment more quickly than traditional incubators.



## 1.1

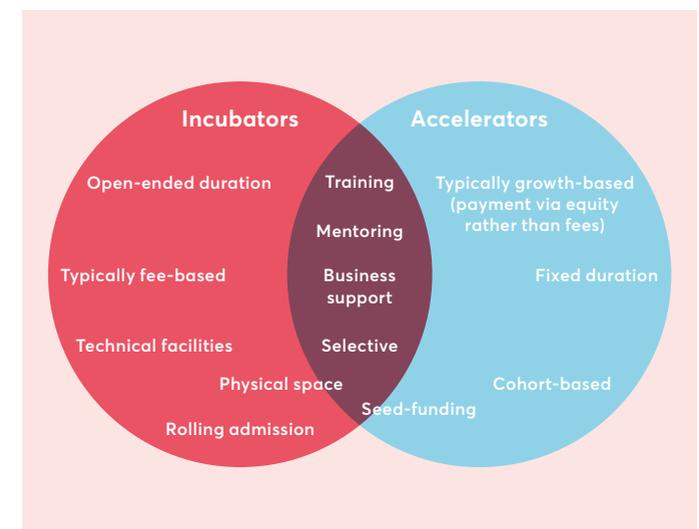
## How do accelerators work?

**The accelerator model has some typical features that set it apart from other approaches to startup investment or business incubation. These include:**

- A highly selective admissions process.
- A focus on cohorts or 'classes' of startups rather than individual companies.
- Mentoring or other business training.
- Intense and time-limited support, usually lasting between 3 and 12 months.

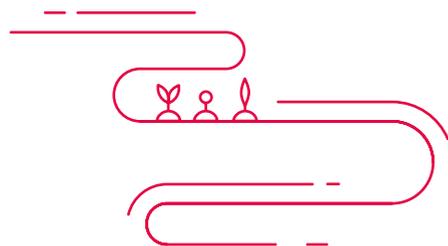
Accelerators may be funded by venture capital investors, public bodies or large corporates, depending on structure and objective. They also often tend to focus on supporting technology-based or digital startups.

**Fig. 2**  
Comparing incubators and accelerators.  
Bone, Allen and Haley (2017) adapted from Dempwolf et al. (2014)



Most programmes encourage a high degree of peer-to-peer learning, so that founders can learn from others in similar circumstances. Mentoring from experienced entrepreneurs also plays a significant role in most programmes. The provision of funding (sometimes in exchange for equity), a workspace, facilitated networking and educational seminars/workshops are other common services.

One of the world's first seed accelerator programmes – which is often credited as having sparked the wider accelerator movement – is the California-based Y Combinator. This programme provides advice, access to networks and seed funding in exchange for an equity stake (typically \$120k for 7 per cent). It has helped to develop more than 1,400 technology companies, including many now-familiar firms such as Dropbox, Airbnb, Coinbase and Reddit, and the combined worth of Y Combinator 'graduates' was estimated at a value of over \$80 billion in June 2017. This accelerator has set the benchmark for others and has informed a lot of Nesta's work in the field.



## 1.2

## Nesta's work on accelerators

**Nesta made early investments in a range of startup incubators, from Seedcamp to Springboard, the European Microelectronics Academy to Design London. We became interested in the emerging trend of seed accelerator programmes in 2010 as a promising low cost and high impact way to develop startups and entrepreneurs.**

Our research began in 2011 with [The Startup Factories](#), which charted the rise of accelerator programmes supporting new technology ventures in the US and Europe. We created the first ever map of accelerator programmes across Europe.

This report was a first step towards defining and analysing the effectiveness of the approach. Alongside that, we started to gather evidence of effectiveness in the wider incubation community with [Incubation for Growth](#). We have continued to monitor this rapidly developing landscape. Our 2015 report, [A Look Inside Accelerators](#), sets out how accelerators could be grouped by type: as ecosystem builders, investors or matchmakers. In turn, [Startup Support Programmes: What's The Difference](#) (2015) explains how accelerator programmes differ in how they make money and when they intervene in the startup journey.

Nesta works with policymakers to help guide their thinking around the role of accelerators within a mix of publicly funded business support mechanisms. In 2017, we collaborated with the UK's Department of Business, Energy and Industrial Strategy (BEIS) to create a new directory mapping all accelerator and incubator activity in Britain. [Business Incubators and Accelerators: the National Picture](#) identifies where these programmes are located throughout the UK and what sectors they focus on.

Subsequent research has sought to prove robustly that accelerators can have impact; to identify activities which add most value and understand the broader 'spillover' effects that they may have on the ecosystem they are situated in. Alongside our research, we have helped to build peer support networks for programme operators. Nesta is one of several founding partners in the Accelerator Assembly, a network of accelerators across Europe. Part of the European Commission's Startup Europe initiative, it aims to enable research, share information, and improve the transparency of programmes.

We are dedicated to understanding how to improve targeted incubation and acceleration for social ventures. We have analysed the emerging trend in social impact accelerator programmes in [Good Incubation](#) and explored the trend around the world – for instance with [Good Incubation in India](#). Nesta was an early investor in Bethnal Green Ventures – now one of the world's leading 'tech for good' accelerator programmes.

In the last ten years, we have partnered with the Cabinet Office, the Open University, the London School of Economics, Imperial College and the UK Science Parks Association among many others, to further illuminate the field of accelerators. Nesta's ongoing research aims to give a richer understanding of the effectiveness of accelerator programmes, help programme managers to evaluate and report their impact to funders, and to help policymakers decide which types of interventions should be funded for emerging startups to thrive.



## 1.3

## Case studies

### Bethnal Green Ventures

Bethnal Green Ventures (BGV) is an accelerator program with a mission to develop tech-based solutions to the world's social problems. It evolved out of Social Innovation Camp – a competition event co-funded by Nesta and the Young Foundation – that brought together software developers and designers with people who understood social problems. When Bethnal Green Ventures launched in 2011, it was one of the first social accelerators in Europe.

**Right**  
Spring 2017 cohort of Tech for Good ventures joining the BGV community.  
Image: Bethnal Green Ventures.



It was also one of the first organisations to be funded by the Cabinet Office's Social Incubator Fund (with match funding from Nesta and the Nominet Trust) in 2013. In 2017, Big Society Capital joined Nesta and Nominet Trust in backing BGV to grow beyond the accelerator programme to offer advice, support and further investment to alumni teams. Since it started, BGV has supported over 200 founders to launch and grow startups using technology for good. Several of the social ventures which it has supported (such as Fairphone, DrDoctor and Mastodon C) have gone on to be thriving, scaling, impactful businesses with revenues and numbers of beneficiaries in the millions.

### Digital Arts and Culture Accelerator

In 2016, Nesta and Arts Council England partnered on an accelerator programme designed to help projects become investment ready. The accelerator offered a three-month programme of business support to help projects explore the potential of their original ideas. This one-off initiative allowed both partners to test how the accelerator model, which is now common in other sectors of business innovation, might work for the arts and cultural sector.

Our evaluation of the accelerator showed that there were some areas where the standard tech model fitted the arts and culture sector imperfectly, such as the focus on equity finance and the premise that any venture would have the sole attention of a founder. However, there was a clear value acknowledged by participants in being part of a cohort of innovators and learning new skills together.

Some of the cohort have gone on to scale their ideas with additional funding. One case is the Arts Impact Fund, an innovative funding partnership between Arts Council England, Esmée Fairbairn Foundation, Bank of America Merrill Lynch and Nesta.



## Further resources



### Toolkit

#### Startup Accelerator Programmes: A practice guide (2014)

[nesta.org.uk/toolkit/startup-accelerator-programmes-a-practice-guide](https://nesta.org.uk/toolkit/startup-accelerator-programmes-a-practice-guide)



### Report

#### A Look Inside Accelerators (2015)

[nesta.org.uk/report/a-look-inside-accelerators](https://nesta.org.uk/report/a-look-inside-accelerators)

#### Business Incubators and Accelerators: the National Picture (2017)

[gov.uk/government/publications/business-incubators-and-accelerators-the-national-picture](https://gov.uk/government/publications/business-incubators-and-accelerators-the-national-picture)

#### Good Incubation (2014)

[nesta.org.uk/report/good-incubation](https://nesta.org.uk/report/good-incubation)

#### Good Incubation in India (2016)

[nesta.org.uk/report/good-incubation-in-india](https://nesta.org.uk/report/good-incubation-in-india)

#### Incubation for Growth (2011)

[nesta.org.uk/report/incubation-for-growth](https://nesta.org.uk/report/incubation-for-growth)

#### Startup Support Programmes:

##### What's the difference? (2015)

[nesta.org.uk/report/startup-support-programmes-whats-the-difference](https://nesta.org.uk/report/startup-support-programmes-whats-the-difference)

##### The Startup Factories (2013)

[nesta.org.uk/report/the-startup-factories](https://nesta.org.uk/report/the-startup-factories)



### Blog

#### Incubators and accelerators: An updated directory for the UK (2017)

[nesta.org.uk/blog/incubators-and-accelerators-an-updated-directory-for-the-uk](https://nesta.org.uk/blog/incubators-and-accelerators-an-updated-directory-for-the-uk)



### Projects and partners

#### Accelerator Assembly

[acceleratorassembly.eu](https://acceleratorassembly.eu)

#### Bethnal Green Ventures

[bethnalgreenventures.com](https://bethnalgreenventures.com)

#### Digital Arts and Culture Accelerator

[nesta.org.uk/project/digital-arts-and-culture-accelerator](https://nesta.org.uk/project/digital-arts-and-culture-accelerator)

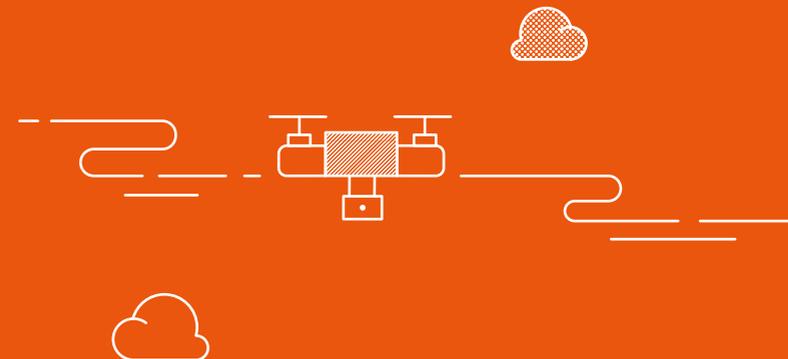
#### Y Combinator

[ycombinator.com](https://ycombinator.com)

## Section 2

# Anticipatory regulation

Traditional ways of regulating are struggling to cope with the pace of change in technology. Anticipatory regulation is an emerging approach that is proactive, iterative and responds to evolving markets.



## 2.1

# How does anticipatory regulation work?

**Fast moving innovation in technologies like drones, blockchain or artificial intelligence (AI) brings big opportunities, but also carries risks for society. At the same time, more mature regulated markets, such as finance and energy, are not delivering the competition and innovation that consumers and the economy need.**

In response, a new set of regulatory practices has emerged that reshape the role of regulation in supporting innovation. New approaches such as the Financial Conduct Authority's sandbox or the development of various testbeds for autonomous vehicles around the world are at the forefront of this change. We are beginning to see a radical shift in both the theory and practice of regulation with the emergence of a new field that Nesta is calling 'anticipatory regulation'.

Anticipatory regulation provides a set of behaviours and tools – essentially, a way of working – that is intended to help regulators and government identify, build and test solutions to emerging challenges.

They include sandboxes: experimental testbeds; use of open data; interaction between regulators and innovators; and, in some cases, active engagement of the public. Three modes of action have appeared in this burgeoning area: advisory, adaptive and anticipatory approaches. These three modes vary in their goal, approach and who they involve but all demonstrate a more proactive, engaged role for regulators in the innovation process.



**Fig. 3**  
From *A Working Model for Anticipatory Regulation*, Nesta (November 2017)



Across these three modes, but particularly with in the anticipatory regulation approach, there are six key elements of this emerging form of regulation:

**Fig. 4**  
6 principles of anticipatory regulation, Nesta (2019)



- **Inclusive and collaborative** in engaging the public and diverse stakeholders where new technologies raise ethical issues with sensitive political implications, and in leveraging the capabilities of businesses, cities and civil society to secure policy goals (for example the collaboration between the National Highway Traffic Safety Administration and NASA on car software issues).
- **Future-facing** in developing resilient, adaptive strategies that can cope with the inherent uncertainty of fast-changing markets.
- **Proactive** in engaging with innovators and innovation early to enable timely, proportionate responses to issues that may scale rapidly.
- **Iterative mindset** in taking a test-and-evolve rather than solve-and-leave approach to novel problems.
- **Outcomes-based** in focusing on validating companies' efforts to achieve well-defined goals, rather than setting rules, and incentivising platforms to support regulatory objectives.
- **Decentralised experimentation** in facilitating diverse responses to the regulation of early-stage opportunities and risks, and where national or global policies and standards are still to be established.



## 2.2 Nesta's work on anticipatory regulation

**Nesta is developing new ways of thinking about regulation, and working to show what it means in practice. In our thinking, we consider the impact this approach could have on the UK's global competitiveness and explore how it could be used to capture the benefits of emerging technologies and harness them for public good.**

In 2012, we analysed the relationship between regulation and innovation in [The Impact of Regulation on Innovation](#). Since 2013, our work on emerging technology and its impacts on society has consistently explored the role of regulation in supporting innovation and preventing any negative social impact. For example, in 2016 we set out detailed plans for a better approach to regulating AI so that it is used to its full potential, but in an ethical way. This included calling for a new [Machine Intelligence Commission](#) for the UK and a code of standards to guide public agencies.

In 2017, we coined the phrase 'anticipatory regulation' to capture the range of new tools being used, both in our practical work and by governments around the world. These included testbeds and sandboxes and uses of open data.

Also in 2017, Nesta initiated a challenge prize – [The Open Up Challenge](#) – as part of a wider package of new reforms driven by government and the Competition and Markets Authority. This £5 million prize is designed to inspire the creation of apps and tools that use 'open data' to help small businesses compete in the digital economy. This project and more recent work on describing anticipatory regulation – for example, reports like [A working model for anticipatory regulation](#) – influenced the development of a £10 million Regulatory Pioneers Fund, announced by the UK government in 2018 as part of its Industrial Strategy. This initiative aims to fund UK regulators to test and scale innovative methods when dealing with emerging technologies.



[openupchallenge.io](http://openupchallenge.io)

Nesta continues to work closely with regulators on a number of projects aimed at supporting innovation, shaping their responses to emerging technologies and applying anticipatory regulation in practice. We are working with the Solicitors Regulatory Authority on a challenge to stimulate AI-powered innovations that could serve to widen access to justice and with Ofgem on the use of consumer data to stimulate greater engagement in the energy market, particularly for vulnerable customers.



[nesta.org.uk/project/flying-high-challenge](http://nesta.org.uk/project/flying-high-challenge)

Through the [Flying High Challenge Prize](#), Nesta is also bringing together city leaders, businesses and citizens to work together to shape regulation and decide how best to use drone technology in cities for social good, by creating or building live testing environments. At the same time, we are continuing to develop and spread the use of anticipatory regulation skills and tools.

Over the next few years, we plan to deepen our work in anticipatory regulation by helping governments and regulators to work in new ways to drive innovation and respond to emerging challenges. We will use practical experiments to demonstrate how this method can help to ensure that the public reap the benefits of emerging technologies and are more involved in shaping and guiding policy.



## 2.3 Case study

### Anticipatory regulation in Singapore

In 2016, Singapore created the Committee on the Future Economy (CFE). It reviewed Singapore's economic strategies for the following decade, including the role of regulation. The process consulted over 9,000 stakeholders, including trade associations and chambers, public agencies, unions, companies, executives, workers, academics, educators and students. The Committee's recommendations encouraged regulators to facilitate innovation in key emerging technologies and take down regulatory barriers they identified as obstructions to innovation.

The CFE's foresight and futures work supports the creation of a regulatory environment that favours innovation and risk-taking, adopting a 'never say no' approach to new business models. Regulatory agencies are encouraged to allow new models to be piloted and to collaborate on reviews of regulation.

Today Singapore is a hotbed of regulatory innovation, particularly for experimentation and testbeds and sandboxes. Here are some examples:

- The **Singapore Autonomous Vehicle Initiative (SAVI)**, established in 2014 to start research into AV transportation and test bedding. SAVI includes an open platform where the industry, research institutions and the authorities can jointly conduct self-driving trials and explore new applications and solutions.

- The Monetary Authority of Singapore has built a **Smart Financial Centre** that includes an open banking platform and sandboxes to test promising FinTech innovations in the Singapore market. The Centre also operates a Financial Sector Technology and Innovation scheme that provides funding to support the early-stage development of novel solutions to financial industry problems.
- The **Energy Market Authority (EMA)** has introduced a regulatory sandbox to support energy innovations. The energy market sandbox allows the EMA to assess the impact of new products and services before deciding on the appropriate regulatory treatment. The results of the sandbox trials can also trigger the permanent amendment or relaxation of certain regulations.



## Further resources



### Report

**A working model for anticipatory regulation: A working paper (2017)**  
[nesta.org.uk/report/a-working-model-for-anticipatory-regulation-a-working-paper](https://www.nesta.org.uk/report/a-working-model-for-anticipatory-regulation-a-working-paper)

**Framework for a regulatory sandbox for the energy sector in Singapore, final determination paper. Energy Market Authority (2017)**  
[ema.gov.sg/ConsultationDetails.aspx?con\\_sid=20170629qjCU7EmqFnKR](https://www.ema.gov.sg/ConsultationDetails.aspx?con_sid=20170629qjCU7EmqFnKR)

**The Impact of Regulation on Innovation (2012)**  
[nesta.org.uk/report/the-impact-of-regulation-on-innovation](https://www.nesta.org.uk/report/the-impact-of-regulation-on-innovation)



### Blog

**A machine intelligence commission for the UK (2016)**  
[nesta.org.uk/blog/a-machine-intelligence-commission-for-the-uk](https://www.nesta.org.uk/blog/a-machine-intelligence-commission-for-the-uk)

**Anticipatory Regulation: 10 ways governments can better keep up with changing industries (2017)**  
[nesta.org.uk/blog/anticipatory-regulation-10-ways-governments-can-better-keep-up-with-fast-changing-industries/](https://www.nesta.org.uk/blog/anticipatory-regulation-10-ways-governments-can-better-keep-up-with-fast-changing-industries/)

**10 principles for public sector use of algorithmic decision making (2018)**  
[nesta.org.uk/blog/10-principles-for-public-sector-use-of-algorithmic-decision-making](https://www.nesta.org.uk/blog/10-principles-for-public-sector-use-of-algorithmic-decision-making)



### Projects and partners

**Flying High Challenge**  
[nesta.org.uk/project/flying-high-challenge](https://www.nesta.org.uk/project/flying-high-challenge)

**Open Up Challenge**  
[openupchallenge.io](https://www.openupchallenge.io)

**Singapore Autonomous Vehicle Initiative**  
[lta.gov.sg/content/ltaweb/en/roads-and-motoring/managing-traffic-and-congestion/intelligent-transport-systems/savi.html](https://www.lta.gov.sg/content/ltaweb/en/roads-and-motoring/managing-traffic-and-congestion/intelligent-transport-systems/savi.html)

**Smart Financial Centre**  
[mas.gov.sg/Singapore-Financial-Centre/Smart-Financial-Centre.aspx](https://www.mas.gov.sg/Singapore-Financial-Centre/Smart-Financial-Centre.aspx)



## Section 3

# Challenge prizes

Challenge prizes offer a reward to whoever can first or most effectively meet a defined challenge. Through a public competition, challenge prizes aim to tap into and engage the broadest possible community of innovators in the solving of a specific problem or challenge.



## 3.1

# How do challenge prizes work?

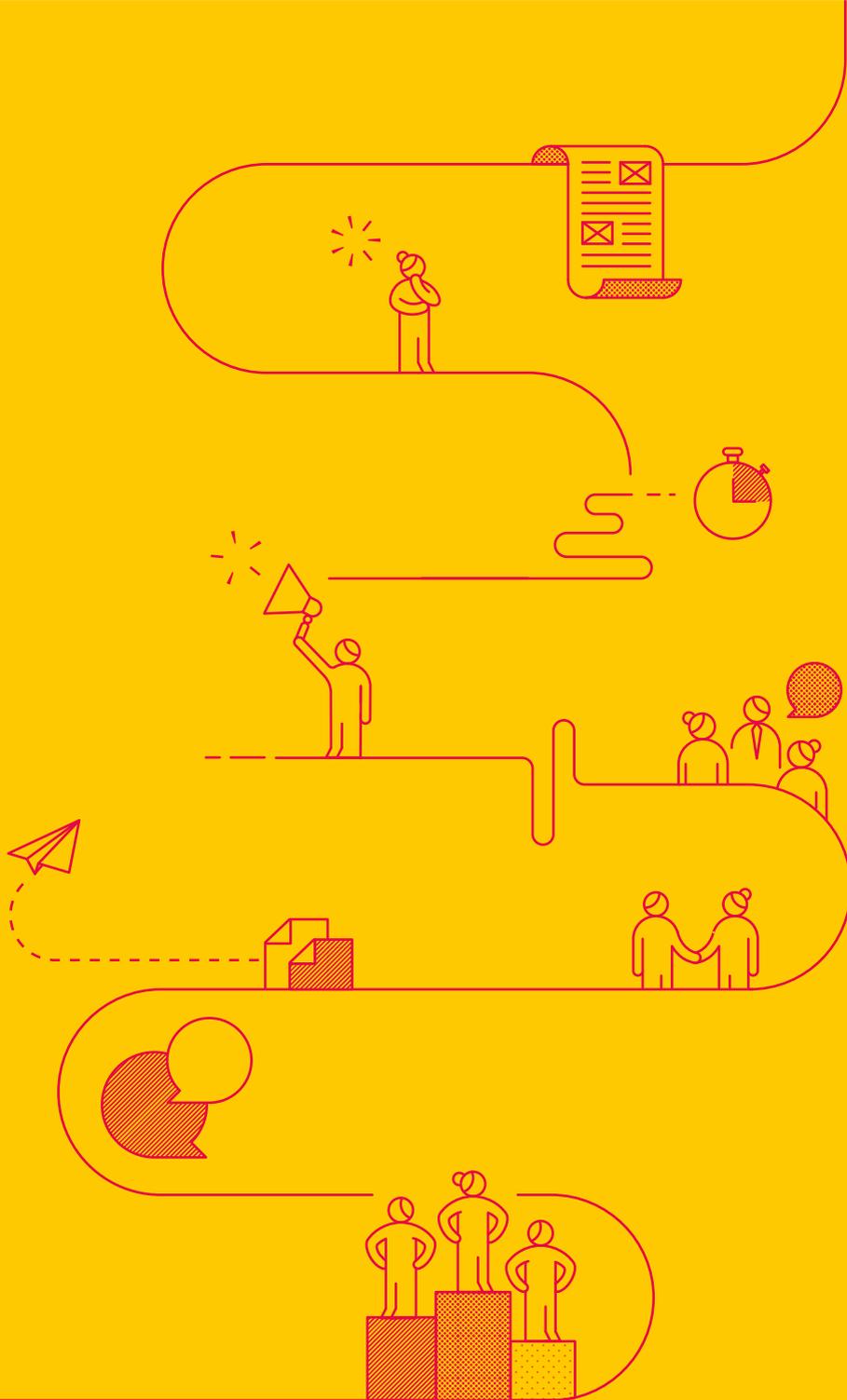
**Challenge prizes can be used to solve problems in almost any field. The formula is simple: offer a financial reward for the first or best solution to a problem, attract the best innovators, and give them the support they need to compete.**

Prizes specify a problem to be solved and incentivise solvers anywhere to address the issue in whatever way they deem best. Published criteria define what success looks like, without prejudging how it is achieved.

Challenge prizes can incentivise new thinking and reward the best solutions, wherever they come from, however they work. They go beyond the usual suspects and reach innovators that other funding mechanisms miss.

Challenge prizes can also bring together innovators and help them thrive. Prizes help innovators by raising their profile, bringing them into contact with expertise, investment and new customers. And alongside the cash prize at the end, prizes typically have other support too, such as seed funding, help with networking, mentoring, testing or access to legal and marketing support.

Finally, prizes can unlock systemic change. They don't just create solutions to a narrow technical problem. They can raise awareness of a broader issue with the public, and they can shape policy and inform regulators. Done right, they can create whole new technologies and markets, and shape them in a socially beneficial way.



Challenge prizes are particularly suited to solving problems that share some key characteristics:

- Problems that are defined well enough so that a clear and unambiguous goal for innovators can be set.
- Problems that would benefit from the fresh thinking that comes from new innovators; for instance, because the field is stagnant, has few players, or there is a related field that is much more dynamic.
- Problems where a prize could attract new innovators to address them, within a reasonable budget and timescale.
- Problems where the additional funding and attention the prize would bring would plausibly accelerate progress (and not just fund what's already happening).
- Problems where the solution could thrive in the market (or find continued funding) after the prize is awarded.

Challenge prizes have a long heritage, going back to 18th century challenges for determining longitude at sea and preserving food for the military. They played a major role in the development of civil aviation too: the first pilots to fly planes across the English Channel (1909) and the Atlantic (1919) were competing for the *Daily Mail* prizes, while Charles Lindbergh's pioneering solo flight from New York to Paris won him the Orteig Prize (1927).

They have seen a renaissance in recent years, with major prizes including the Ansari XPRIZE for the first private human spaceflight (awarded 2004), the DARPA Grand Challenges for autonomous vehicles (2004–2013) and Nesta's Longitude Prize to combat antimicrobial resistance (launched 2014).



## 3.2

# Nesta's work on challenge prizes

**Nesta's work on challenge prizes began with the £1 million Big Green Challenge in 2008, which encouraged community-led responses to climate change. Some 355 groups came forward with a wide range of imaginative and practical ideas for reducing CO<sub>2</sub> emissions in their communities, with three winning teams each receiving £300,000 (and one runner-up receiving £100,000), along with non-financial support, to develop their ideas.**



[challenges.org](http://challenges.org)

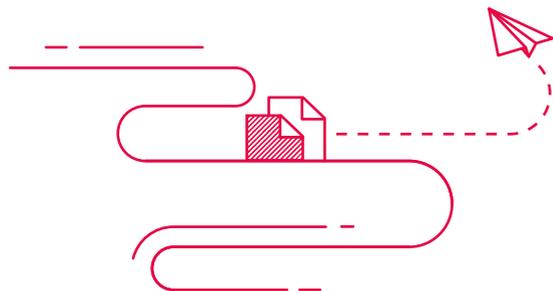
In 2012, inspired by our research into the growth of innovation contests and inducement prizes around the world, we launched the **Challenge Prize Centre** to increase understanding and practical evidence about inducement prizes as an effective way of stimulating innovation. We did this to encourage more governments, charities and businesses to use the approach effectively for social good.

Today, our Challenge Prize Centre is a hub of expertise on how to use prizes effectively to address social challenges. Since 2013, we have run over 30 prizes totalling £17 million in award value and attracting more than 7,000 innovators, whose bright ideas have addressed issues ranging from how drone technology can be used to benefit cities to how to age well or to better integrate migrants and refugees in Europe.

As well as developing prizes to address a range of pressing challenges, the Challenge Prize Centre builds capability and evidence on how to use this approach for social impact. We are committed to growing awareness about challenge prizes and expanding our international network to reach more innovators and potential partners.

In 2015 and 2018 we hosted the Challenges of Our Era summits. These events gathered policymakers, academic researchers, frontline professionals and innovators, technologists and funders to design new challenge initiatives. Topics focused on global problems such as food security and surgical inequality.

We have also created a defined methodology, designed to find areas where innovation is needed most and establish how best to reach new communities of innovators. In 2014, we developed a practice guide to share this approach, providing practical tools and guidance on how to develop a challenge prize.



## 3.3

## Case studies

### The Data Driven Farming Prize

For the Data Driven Farming Prize, delivered on behalf of the United States Agency for International Development (USAID), Nesta invited innovators to create smart tools to support farmers in producing more food in Nepal. More than 140 teams applied from around the world, with 13 finalists given additional support to develop their product further, with exciting results for plant diagnostics and moisture management.

**Right**  
Data Driven  
Farming launch



## Open Up Challenge

The Open Up Challenge forms part of the UK Competition & Markets Authority's (CMA) package of measures to increase competition and innovation in retail banking. Nesta ran the challenge in parallel with the emergence of open banking in the UK, a world-first regulatory initiative to give bank customers control over their data and create opportunities for new business banking models.

The Open Up Challenge sought out the most compelling use cases for how fintechs could use open banking to create value for small businesses – whether through helping them find and compare the most appropriate financial products and services, automating routine but burdensome administrative processes, helping them raise capital or managing and predicting their cashflow. In addition to financial rewards for the best ideas brought to market, the Challenge provided access to a unique Data Sandbox to support the fintechs' product development.

The Challenge resulted in a wide range of innovative products and services coming to market, which are now creating new opportunities for small businesses to benefit from open banking.

**Right**  
Open Up Challenge  
winners 2018



Coconut.

CREDIT  
DATA  
RESEARCH

FINPOINT

Fluidly

Funding  
Circle

fundingoptions

OW

Swoop

## The Dynamic Demand Challenge

The Dynamic Demand Challenge set out to stimulate the development of new technology solutions that help cut emissions and manage demand for electricity at peak times. One contestant, Upside Energy, which balances demand in the grid with energy stored in electric vehicles, domestic heating systems and UPS devices, has attracted investment of over £5 million since entering the prize. Meanwhile, finalist Powervault, which makes a home energy storage device, has also gained new investors since the prize was awarded.

**Right**  
Dynamic Demand  
winners



## Further resources



### Toolkit

#### Challenge Prizes: A practice guide

[nesta.org.uk/toolkit/challenge-prizes-a-practice-guide](https://www.nesta.org.uk/toolkit/challenge-prizes-a-practice-guide)



### Report

#### And the Winner Is...Capturing the Promise of Philanthropic Prizes, McKinsey + Company (2009)

[mckinsey.com/industries/social-sector/our-insights/and-the-winner-is-philanthropists-and-governments-make-prizes-count](https://www.mckinsey.com/industries/social-sector/our-insights/and-the-winner-is-philanthropists-and-governments-make-prizes-count)

#### Challenge Prizes Landscape Review (2012)

[nesta.org.uk/report/challenge-prizes-landscape-review](https://www.nesta.org.uk/report/challenge-prizes-landscape-review)

#### Do you have a wicked problem?

#### Research shows a competition could speed up finding the solution (2018)

[sitra.fi/en/news/wicked-problem-research-shows-competition-speed-finding-solution](https://www.sitra.fi/en/news/wicked-problem-research-shows-competition-speed-finding-solution)

#### The Impact of Innovation Inducement Prizes (2013)

[nesta.org.uk/report/the-impact-of-innovation-inducement-prizes](https://www.nesta.org.uk/report/the-impact-of-innovation-inducement-prizes)



### Projects and partners

#### Challenges platform

[challenges.org](https://www.challenges.org)

#### Challenge Prize Centre

[challengeprizecentre.org](https://www.challengeprizecentre.org)

#### Longitude Prize

[longitudeprize.org](https://www.longitudeprize.org)



## Section 4

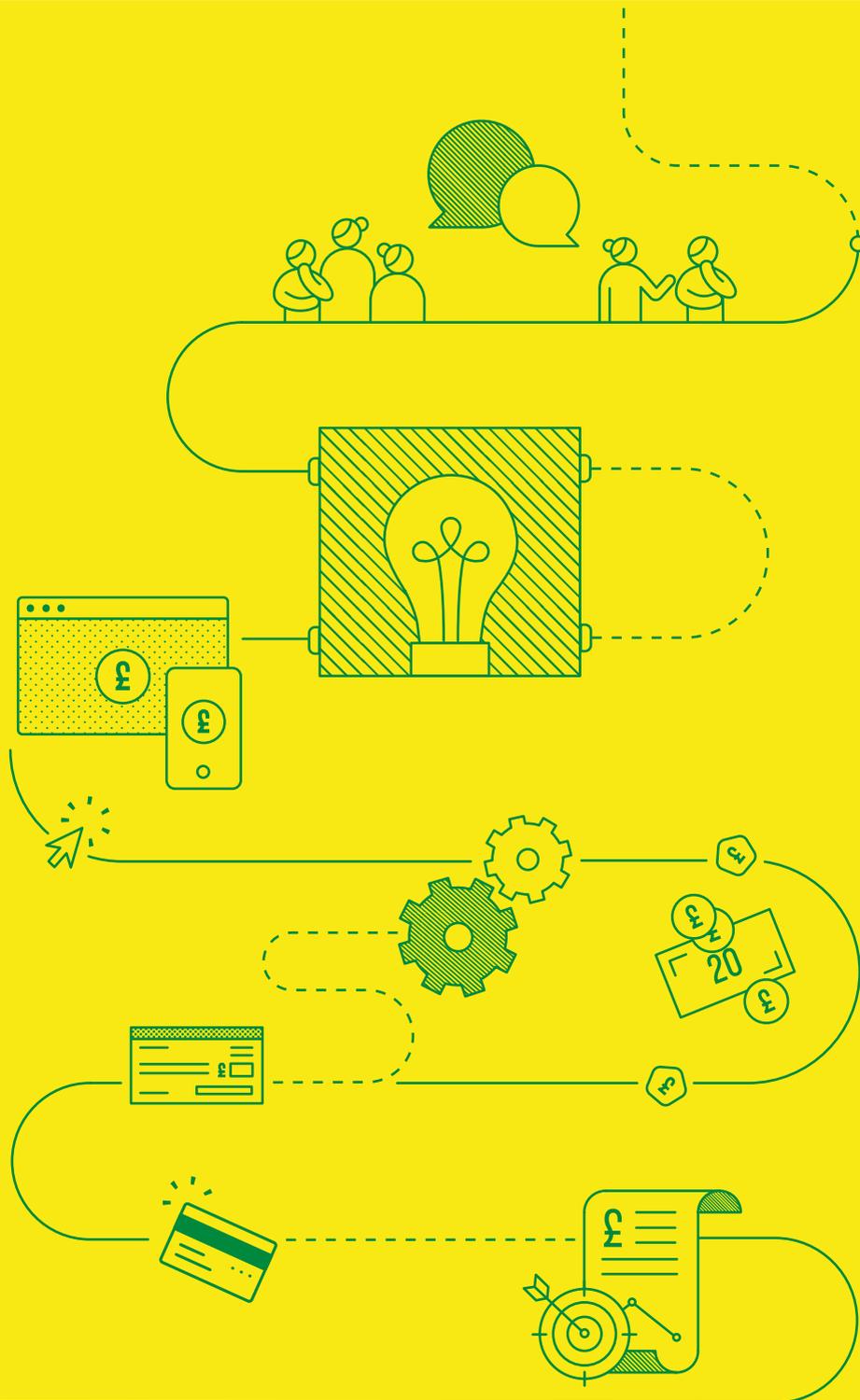
# Crowdfunding

Crowdfunding is a method of financing projects and businesses through many small donations from a large group of people. The funding process is usually facilitated by dedicated websites or online platforms.



## 4.1

## How does crowdfunding work?



Modern crowdfunding emerged in the early 2000s as a new way of financing music and culture. It started to grow rapidly in 2008 in the aftermath of the financial crisis, as traditional funding sources (such as bank loans) became harder to come by. Advances in technology have also contributed to its popularity – the internet has made it radically easier to connect potential funders with people looking for funding, whatever the cause.

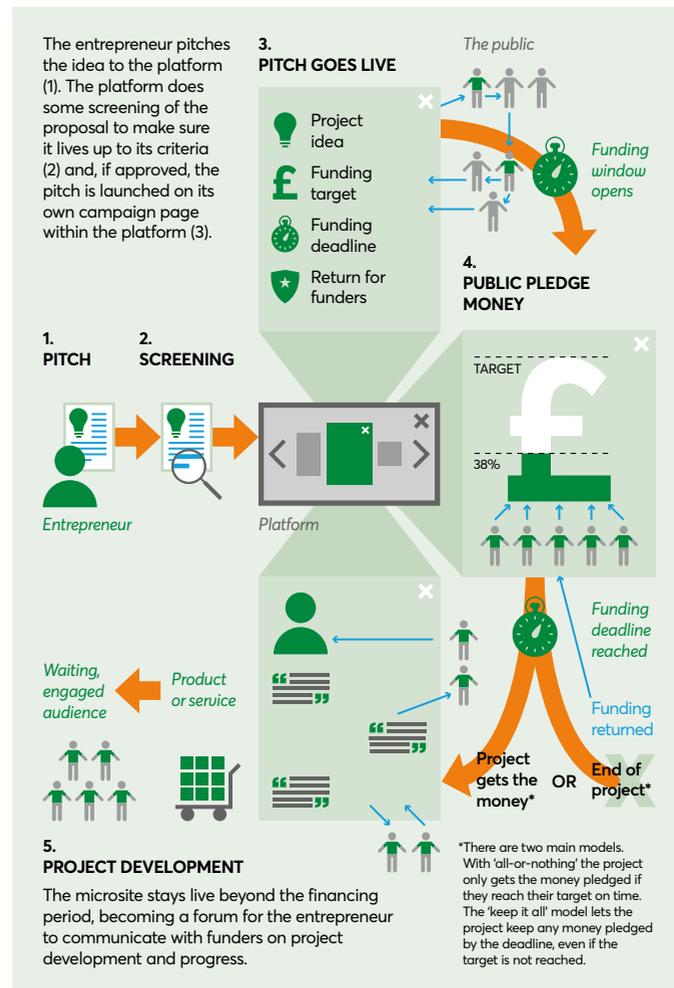
There are four main types of crowdfunding offering very different financial instruments and differing vastly in the amount of money that can be raised through them.

| Crowdfunding Model                     | Description   |
|--|---|
| <b>Donations-based</b>                 | Individuals donate small amounts towards a specific charitable project while receiving no tangible benefit except for seeing the project go ahead. The average amount raised through this model is £714.  |
| <b>Rewards-based</b>                   | People contribute to projects and receive a tangible, but non-financial, reward return such as a product or tickets to an event. The average amount raised through this model is £6,326.  |
| <b>Equity-based</b>                    | Individuals invest in equity or profit/revenue sharing in a project or business in the hope of making a financial return if the business exits. The average amount raised through this model is £523,978.   |
| <b>Lending-based (AKA P2P-lending)</b> | Individuals or businesses seeking a loan apply through the platform, with members of the crowd taking small chunks of the overall loan. Investors make a profit when the loan is repaid with interest. The average amount raised through this model is £76,280. |

At the heart of most crowdfunding is the idea of a 'platform': a mechanism, usually a website, that allows would-be investees to make offers to funders and helps the two parties interact. Kickstarter, Crowdfunder, Zopa, Crowdcube, Seedrs and Funding Circle are all examples of platforms.

While 'how crowdfunding works' varies significantly depending on the type of project and whether people are investing loans, equity or giving a donation, the process is outlined in the model below.

**Fig. 5**  
The Crowdfunding  
Process from Crowding  
In, Nesta (December  
2012)



## 4.2

## Nesta's work on crowdfunding

**Nesta has been involved in the alternative finance sector since 2010, working to understand how new methods of finance can be used to bring innovative ideas to life. We have sought to support and inform the development of crowdfunding, through research and practical programmes – creating directories, practical guides and tools – and bringing platforms and regulators together to shape the market.**

From 2012 to 2016, our market studies – developed in partnership with the University of Cambridge and the majority of platforms in the market – mapped the growth and key trends in the crowdfunding market. We documented how the sector grew from a few startups at the fringes of the financial sector to, in less than a few years, a billion-pound market that plays a significant role in how people in the UK invest their money and businesses raise finance.

In 2013, to help fundraisers and investors navigate the market, Nesta launched both the UK's first directory of crowdfunding platforms [CrowdingIn.com](http://CrowdingIn.com) and a guide called [Working the Crowd](#) to provide practical advice on what crowdfunding is and how to develop a campaign.

Alongside our market studies, we have also explored how specific models operate and considered the potential policy interventions to support their growth. [The Venture Crowd](#) (2012) analysed the UK equity crowdfunding market and [Banking on Each Other](#) (2013) subsequently looked at the emerging field of P2P lending for small businesses, drawing on data from Funding Circle.



Through our practical programmes and experiments, Nesta has also sought to support innovation in the market, specifically with a focus on how crowdfunding can be used to fund projects with a social purpose. In 2016, [Crowdfunding Good Causes](#) explored opportunities and challenges in crowdfunding for good causes, focusing on the needs of charities, community groups and social entrepreneurs.

In 2013, through the Innovation in Giving Fund, Nesta supported three organisations that were using the crowdfunding model to increase levels of charitable giving. These included [buzzbnk](#), which specialised in social venturing, [Solar Schools](#), which helped schools fundraise for renewables, and [Peoplefundit](#) (which has since become Crowdfunder), which supports a range of projects and startup ideas, including creative projects.

Our ongoing work in this space looks at crowdfunding for philanthropy and good causes, and how to combine the approach with institutional funding.



[fundit.buzz](#)

[1010uk.org/solar-schools](#)

[crowdfunder.co.uk](#)



## 4.3

## Case studies

### Matched Crowdfunding for Arts and Heritage Pilot

In 2017 Nesta set up a matched crowdfunding pilot in collaboration with two UK-based funders, Arts Council England and Heritage Lottery Fund, each of which provided £125,000 of grant funding for arts and heritage projects raising between £4,000 and £40,000 through crowdfunding.

**Fig. 6**  
Detail of Matched crowdfunding for arts and heritage in numbers



## Further resources



### Report

**Banking on Each Other: The rise of peer-to-peer lending to businesses (2013)**  
[nesta.org.uk/report/banking-on-each-other-the-rise-of-peer-to-peer-lending-to-businesses](https://www.nesta.org.uk/report/banking-on-each-other-the-rise-of-peer-to-peer-lending-to-businesses)

**Crowdfunding Good Causes (2016)**  
[nesta.org.uk/report/crowdfunding-good-causes](https://www.nesta.org.uk/report/crowdfunding-good-causes)

**Crowding In (2012)**  
[media.nesta.org.uk/documents/crowding\\_in\\_report.pdf](https://media.nesta.org.uk/documents/crowding_in_report.pdf)

**Matching the Crowd: Combining crowdfunding and institutional funding to get ideas off the ground (2017)**  
[nesta.org.uk/report/matching-the-crowd-combining-crowdfunding-and-institutional-funding-to-get-great-ideas-off-the-ground](https://www.nesta.org.uk/report/matching-the-crowd-combining-crowdfunding-and-institutional-funding-to-get-great-ideas-off-the-ground)

**Pushing Boundaries: The 2015 UK Alternative Finance Industry Report (2016)**  
[nesta.org.uk/report/pushing-boundaries-the-2015-uk-alternative-finance-industry-report](https://www.nesta.org.uk/report/pushing-boundaries-the-2015-uk-alternative-finance-industry-report)

**Understanding Alternative Finance (2014)**  
[nesta.org.uk/report/understanding-alternative-finance-the-uk-alternative-finance-industry-report-2014](https://www.nesta.org.uk/report/understanding-alternative-finance-the-uk-alternative-finance-industry-report-2014)

**The Venture Crowd (2013)**  
[nesta.org.uk/report/the-venture-crowd](https://www.nesta.org.uk/report/the-venture-crowd)

**Working the Crowd (2013)**  
[nesta.org.uk/report/working-the-crowd](https://www.nesta.org.uk/report/working-the-crowd)



### Blog

**How to find the right crowdfunding platform for your good cause (2016)**  
[nesta.org.uk/blog/how-to-find-the-right-crowdfunding-platform-for-your-good-cause](https://www.nesta.org.uk/blog/how-to-find-the-right-crowdfunding-platform-for-your-good-cause)

**Lessons from four years of running the UK's first crowdfunding platform directory CrowdingIn.com (2017)**  
[nesta.org.uk/blog/lessons-from-four-years-of-running-the-uks-first-crowdfunding-platform-directory-crowdingincom](https://www.nesta.org.uk/blog/lessons-from-four-years-of-running-the-uks-first-crowdfunding-platform-directory-crowdingincom)



### Projects and partners

**buzzbnk**  
[fundit.buzz](https://fundit.buzz)

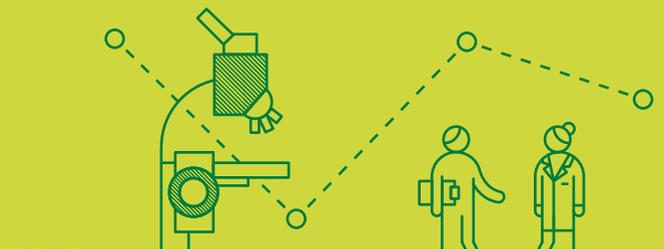
**Peoplefundit**  
[crowdfunder.co.uk](https://crowdfunder.co.uk)

**Solar Schools**  
[1010uk.org/solar-schools](https://1010uk.org/solar-schools)

## Section 5

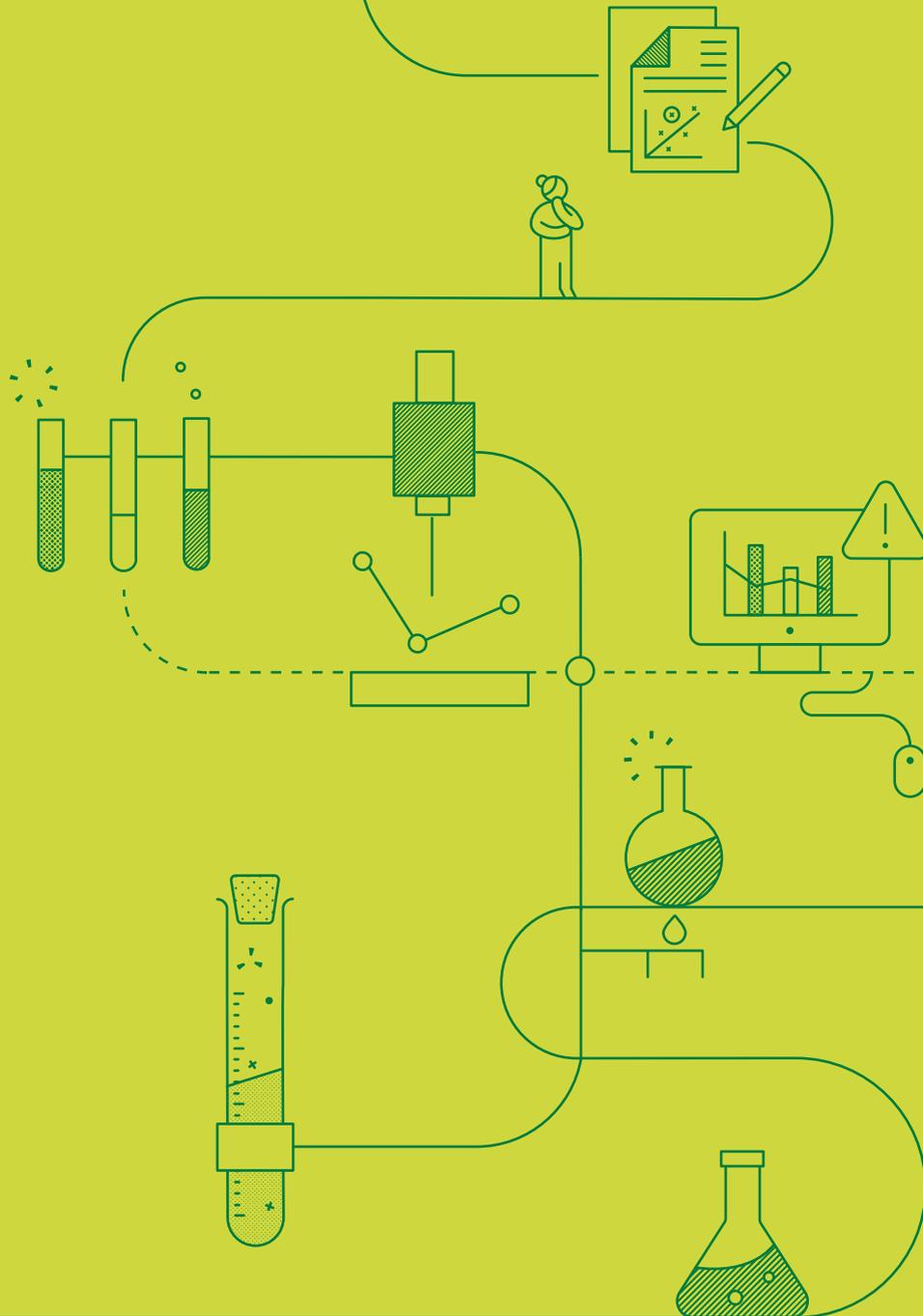
# Experimentation

An experiment is a way of trying something new while putting in place the necessary structures to find out if it works. There is a wide range of experimental methods suited to different purposes with varying degrees of rigour.



## 5.1

## How does experimentation work?



**We often don't know how innovations will work out so experimentation means that any solution can be treated as a work in progress, which tweaking and tinkering can improve. They allow organisations to explore new solutions, reducing wasted time and resources on initiatives that do not work.**

There are several ways to experiment, depending on the context. Sometimes it can involve working closely with the people who will use the end solution to see how an innovation works in real-life, like prototyping. Other times, it can involve using more robust evaluation methods – such as **Randomised Controlled Trials (RCTs)** – to test an idea and create evidence to support it.

Experiments should always be designed in a way that best answers the question or hypothesis set.

Broadly speaking, there are four types of experiments we can use to test and learn about innovation – these are set out below.

#### **01. Randomised evaluations**

Randomised controlled trials (RCTs) are often used to estimate the impact of an intervention or programme. They work a bit like science experiments but can be carried out in the real world, to test social, health or innovation policies. RCTs give us the most certainty that what we're doing works, or not. They use a control group to compare people who have received an intervention with similar people who didn't. To make sure the groups being compared aren't biased, they are randomly assigned.



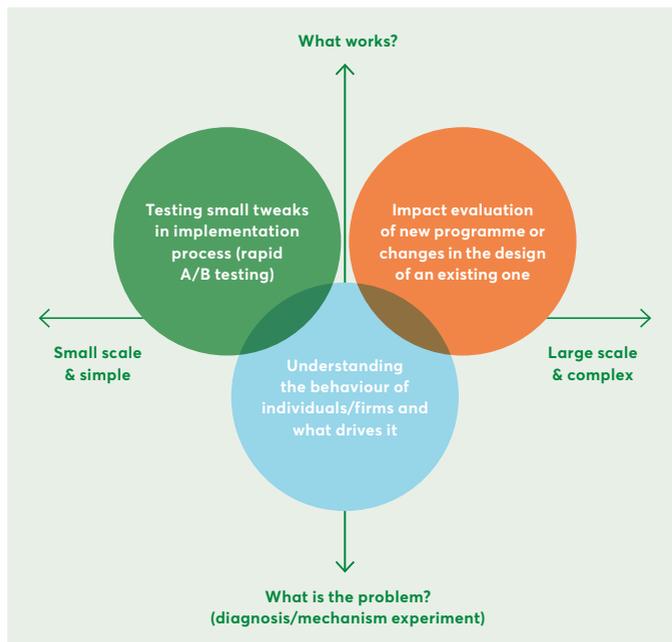
[povertyactionlab.org](http://povertyactionlab.org)

Other methods – called quasi-experiments (QEDs) – replicate this model where real randomisation isn't possible, by using statistical techniques to construct a comparison group. These designs are traditionally used in impact evaluation – [J-PAL](#), for example, has run 922 randomised evaluations in 81 countries to find out what works in fighting poverty. RCTs are also being used by the Behavioural Insights Team (BIT) – to understand the behaviour of individuals and firms. In the UK, RCTs and QEDs are building a robust evidence base to make government and policy more experimental.

## 02. A/B tests

A/B tests use RCTs to test small tweaks in design or implementation, often online. An A/B test is a simple way of finding out what users prefer. They randomly assign a particular design or communications strategy – the wording of a letter or the header of a website – to different groups of users. We can then compare response rates to see what was most effective. A/B tests are used in business all the time, and as 'nudges' to improve the design and delivery of services. A/B tests show the range of questions we can use randomised experiments to answer.

**Fig. 7**  
Different ways  
to use trials



[developingchild.harvard.edu](http://developingchild.harvard.edu)

## 03. Rapid-cycle experiments

Rapid-cycle experiments are a new way of improving how innovations are designed and implemented. They aim to set up better feedback loops between real-time learning from delivery and the top-down implementation of programmes. In the US, the [Frontiers of Innovation](#) platform at the [Harvard Centre on the Developing Child](#) is developing science-based innovations through rapid-cycle iterations. Rapid experiments enable teams and organisations to work together to solve problems, collaborating to design, implement and test small changes in short loops that provide data on whether innovations are producing better results than 'business-as-usual'. In the UK, Dartington Service Design Unit are trialling a new method for 'Accelerated Design and Programme Testing' in their work with the [Family Nurse Partnership](#).



[dartington.org.uk/project/fnp\\_adapt](http://dartington.org.uk/project/fnp_adapt)

There are different ways to learn from rapid-cycle experiments that give us different degrees of certainty in their effects. Quantitative monitoring data and RCTs can be used to estimate impact on key outcomes and qualitative methods provide crucial feedback from staff and stakeholders. Using a comparison group helps increase confidence in the results of rapid experiments. Some evaluators are now using 'nimble' randomised trials to test rapid-cycle changes more rigorously.

## 04. Design exploration and experimentation

Design exploration and experimentation takes an experimental approach to developing or testing innovations, often in their earlier stages. At the earliest stages when new ideas are being explored, trying out new and different frames helps develop ideas and reframe them as hypotheses. Tools like speculative design and horizon scanning can be used in this ideational phase to adopt an 'experimental mindset'.

Once an idea has been developed, it can be tested experimentally. For example, a prototyping experiment is where a model of an innovation is tested with users. Qualitative or data-led methods can be used to learn from these experiments. [Unanimous AI](#) have used AI systems experiments to test the power of collective intelligence predictions. [Demos Helsinki](#) are using a human-centred approach to strengthen government's experimentation capacity – experiments now have an official role in Finnish policy design. At any stage of innovation, working with an experimental mindset encourages us to test, learn and refine as we go.



[unanimous.ai/swarm-insight](http://unanimous.ai/swarm-insight)

[demoshelsinki.fi/en](http://demoshelsinki.fi/en)

## 5.2 Nesta's work on experiments

**Nesta was an early promoter of experiments in government and public policy. Today, we work with governments around the world to help them to experiment more effectively.**

In 2011, we published *State of Uncertainty*, a report calling for a more experimental approach to be taken in innovation policymaking. The idea was that innovation policy would work better if it were modelled on experimental science and focused on minimising the uncertainty entrepreneurs face.

Then, in 2013, Nesta led on one of the first randomised controlled trials (RCTs) in business support to assess the effectiveness of Creative Credits – a programme linking small firms with providers from the creative industry. The resulting report revealed important insights about the policy that normal evaluation methods used by government would not typically show.

In 2014, Nesta supported the Behavioural Insights Team (BIT), joining in a partnership with its employees and the Cabinet Office. Also known as the government's 'nudge unit', BIT has become one of the UK government's most successful innovation labs, focusing on using behavioural insights to improve public policy. Since becoming an independent organisation, BIT has continued to grow, and has expanded to the US, Singapore and Australia.

In the same year, Nesta launched the *Innovation Growth Lab* (IGL). This global partnership brings together governments, foundations and researchers to develop and test different approaches to support innovation, entrepreneurship and growth. It aims to make policy in this area more experimental and evidence-based, while also building the capacity of people and institutions to conduct their own RCTs.



[innovationgrowthlab.org](http://innovationgrowthlab.org)

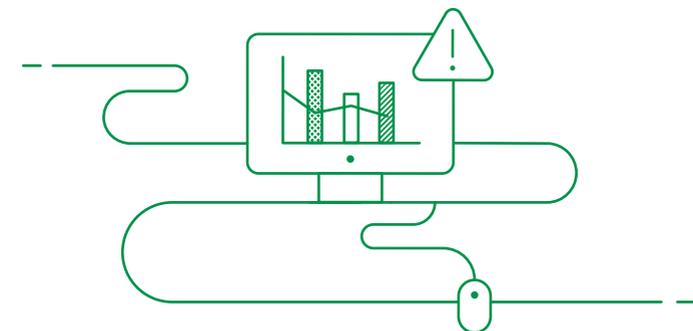
Since it was founded, IGL has funded over 30 RCTs in innovation, entrepreneurship and business growth, and partnered with more than a dozen organisations to promote the use of RCTs in this field.

IGL also hosts a global conference each year, bringing together senior policymakers, practitioners and researchers from across the globe to explore future innovation and entrepreneurship policies.

In parallel with this work, Nesta's Innovation Skills team work to promote an experimental culture within governments. Most recently, it initiated *States of Change* – a programme working with progressive governments and public innovation practitioners around the world to strengthen their capacity to experiment.



[nesta.org.uk/project/states-change](http://nesta.org.uk/project/states-change)



## 5.3 Case study



[nesta.org.uk/report/a-guide-to-creative-credits](https://nesta.org.uk/report/a-guide-to-creative-credits)

### Creative Credits

Creative Credits: A randomised controlled industrial policy experiment, is a Nesta study that used an RCT to see if a novel business support scheme connecting small businesses and creative providers to boost innovation was effective.

The pilot study, which began in Manchester in 2009, was structured so that vouchers, or 'Creative Credits', would be randomly allocated to small and medium-sized businesses applying to invest in creative projects such as developing websites, video production and creative marketing campaigns, to see if they had a real effect on innovation.

The research found that the firms who were awarded Creative Credits enjoyed a short-term boost in their innovation and sales growth in the six months following completion of their creative projects. However, the positive effects were not sustained, and after 12 months there was no longer a statistically significant difference between the groups that received the credits and those that did not.

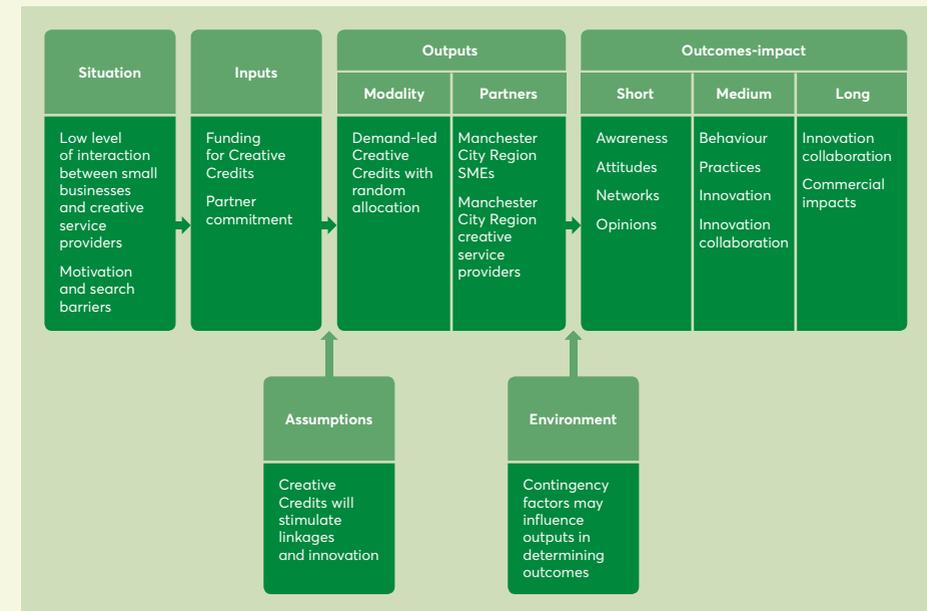
Nesta published a **report** on the study, which argued that these results would have remained hidden using the normal evaluation methods used by government.

Figure 8 presents Creative Credits' logic model. Previously, Nesta's research showed that firms which use creative inputs in their production tend to be more innovative. The logic model sets out assumptions that the scheme made and the nature of the intended outcomes, were the relationship between use of creative inputs and innovation to be causal.



[media.nesta.org.uk/documents/a\\_guide\\_to\\_creative\\_credits.pdf](https://media.nesta.org.uk/documents/a_guide_to_creative_credits.pdf)

**Fig. 8**  
Logic model for  
Creative Credits



## Further resources



### Toolkit

#### IGL Guide on trials

[innovationgrowthlab.org/guide-randomised-controlled-trials](http://innovationgrowthlab.org/guide-randomised-controlled-trials)

#### IGL Experimentation toolkit

[toolkit.innovationgrowthlab.org/home](http://toolkit.innovationgrowthlab.org/home)



### Report

#### Better Public Services Through Experimental Government (2015)

[nesta.org.uk/report/better-public-services-through-experimental-government](http://nesta.org.uk/report/better-public-services-through-experimental-government)

#### A Guide to Creative Credits (2011)

[nesta.org.uk/report/a-guide-to-creative-credits](http://nesta.org.uk/report/a-guide-to-creative-credits)

#### Experimental Innovation and Growth Policy: Why do we need it? (2016)

[innovationgrowthlab.org/sites/default/files/styles/experimental\\_innovation\\_and\\_growth\\_policy\\_why\\_do\\_we\\_need\\_it.pdf](http://innovationgrowthlab.org/sites/default/files/styles/experimental_innovation_and_growth_policy_why_do_we_need_it.pdf)

#### State of Uncertainty: Innovation policy through experimentation (2011)

[nesta.org.uk/report/state-of-uncertainty](http://nesta.org.uk/report/state-of-uncertainty)



### Blog

#### Towards an experimental culture in government: reflections on and from practice (2017)

[nesta.org.uk/blog/towards-an-experimental-culture-in-government-reflections-on-and-from-practice](http://nesta.org.uk/blog/towards-an-experimental-culture-in-government-reflections-on-and-from-practice)

#### Exploring the Unobvious: Six Principles to Establish Experimental Practices (2018)

[nesta.org.uk/blog/exploring-unobvious-six-principles-establish-experimental-practices](http://nesta.org.uk/blog/exploring-unobvious-six-principles-establish-experimental-practices)



### Projects and partners

#### Demos Helsinki

[demoshelsinki.fi/en](http://demoshelsinki.fi/en)

#### Experimental Finland

[kokeilevasuomi.fi/en/frontpage](http://kokeilevasuomi.fi/en/frontpage)

#### Family Nurse Partnership

[dartington.org.uk/project/fnp\\_adapt](http://dartington.org.uk/project/fnp_adapt)

#### Frontiers of Innovation

[developingchild.harvard.edu/innovation-application/frontiers-of-innovation](http://developingchild.harvard.edu/innovation-application/frontiers-of-innovation)

#### IGL Trials Database

[innovationgrowthlab.org/igl-database](http://innovationgrowthlab.org/igl-database)

#### J-PAL

[povertyactionlab.org](http://povertyactionlab.org)

#### States of Change

[nesta.org.uk/project/states-change](http://nesta.org.uk/project/states-change)

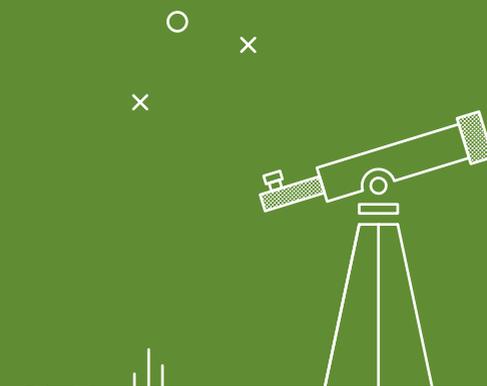
#### Unanimous AI

[unanimous.ai/swarm-insight](http://unanimous.ai/swarm-insight)

## Section 6

# Futures

Futures is an umbrella term for tools like horizon scanning, trend analysis, scenario planning and Delphi. These methods are used to analyse emerging trends, anticipate their impact and build stories about possible futures.



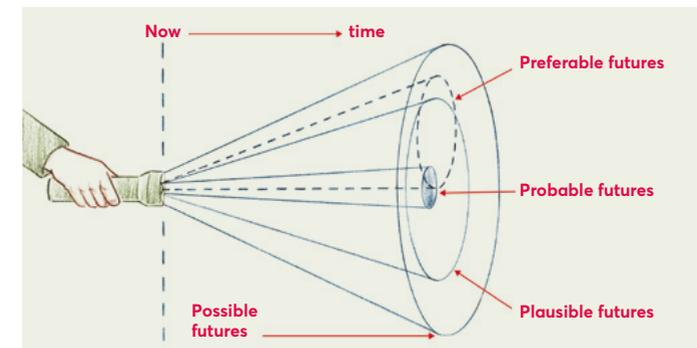
## 6.1 How does futures work?

The further we look into the future, the greater uncertainty there is. Futures studies aim to build understanding about the forces shaping the future, what surprises could be on the horizon and what actions could be taken today to deal with them. Futures methods are used across the public, private and social sectors.

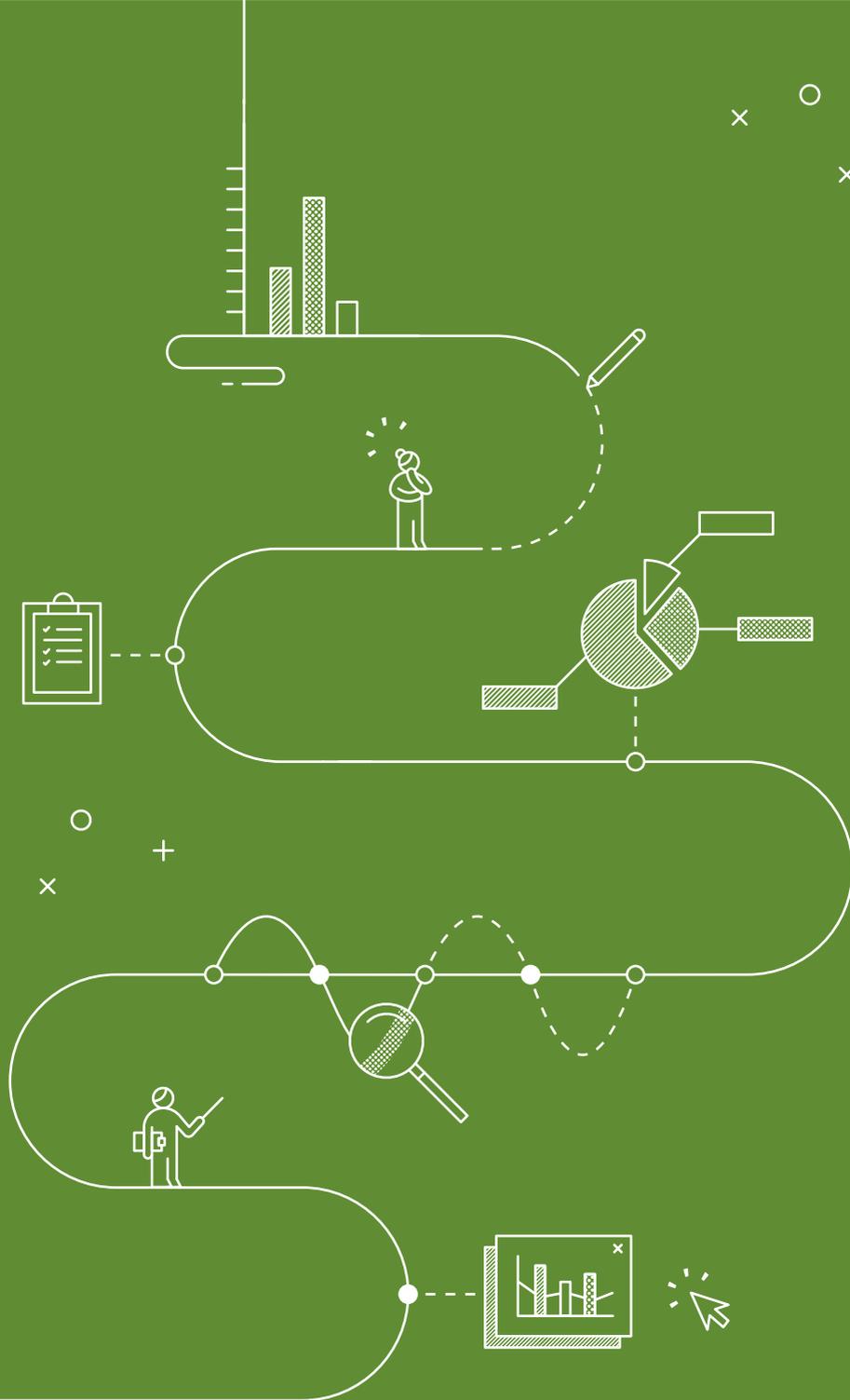
Typically starting with horizon (or environment) scanning, both qualitative and quantitative research methods are used to spot signals of change, track trends and make projections. Once this data and information has been gathered, these insights can be organised in informative and creative ways to help people imagine different futures.

The fundamental task of futures studies is to explore and propose possible, probable and preferable futures. This idea is core to much of the theory, practice and outputs in the field over the past 50 years.

**Fig. 9**  
From *Don't stop thinking about tomorrow: a modest defence of futurology*, Nesta (2013)



These futures can be brought to life through the development of future scenarios, by telling stories through science fiction and personas, and even creating objects from the future using speculative design methods.



## 6.2 Futures methods in practice

Efforts to 'divine' what the future holds have been an important part of human cultures since the time of mystics, oracles and shamans. In some cases, the roots of futures approaches can be traced back hundreds of years; for example, Thomas More introduced the principles behind the Utopian method as early as the 1500s, spawning a whole genre in literature, film and the arts. However, it was in the post-war period that 'futures' became an increasingly credible and robust field of study.

During this period, futures methods were most closely associated with military and corporate strategy. The US think-tank **RAND** was founded after the Second World War and focused initially on the future of military strategy. Another well-known incubator of futures thinking was Shell, which has famously been using scenarios in its corporate planning for over 50 years.

Over time, futures methods were proactively adopted by the policymaking community. Singapore's government has a longstanding centre of expertise in forecasting for the public sector in the form of the **Centre for Strategic Futures**. In recent years the UK's Government Office for Science has applied futures methods to look at trends in ageing and the prospects for our cities. In the US, the National Intelligence Council publishes an assessment every four years of how key trends will shape the world over the next 20 years to help decision-makers plan for the long term.



[rand.org](http://rand.org)



[csf.gov.sg](http://csf.gov.sg)

Given the range of different futures methods in existence, and the range of sectors in which they are used, it is important to ensure that the right tool is being used to solve a given challenge. To this end, the Government Office for Science's **Futures Toolkit** organises tools according to four practical purposes futures methods can serve:

01. Gathering intelligence about the future (for example, 7 Questions and the Delphi method).
02. Exploring the dynamics of change (for example, Driver Mapping and the Axes of Uncertainty).
03. Describing what the future might be like (for example, Visioning and SWOT Analysis).
04. Developing/testing policy and strategy (for example, Backcasting and Roadmapping).



## 6.3 Nesta's work on futures

**Nesta's use of futures methods started to gain momentum from 2012 onwards, focusing on emerging technologies and new frontiers in science.**

In 2013 we published *Don't Stop Thinking about Tomorrow: a modest defence of futurology*, making the case for futures as a valuable means of interrogating change and innovation.

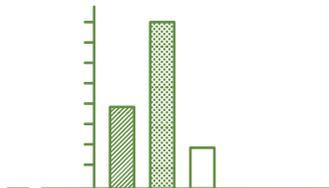
Nesta has commonly used futures methods as a route into exploring topics or technologies which have later gone on to become increasingly important to our work. This is particularly the case with our work on Artificial Intelligence, Virtual Reality, the healthcare system and the impact of automation on the workforce.

Equally, we use data-mapping as a tool for identifying early signals of change and the growth in new technologies and networks. This is playing an important role in our **Next Generation Internet** project which focuses on creating a more inclusive web by 2025.

Crucially, our application of futures methods is not limited to technology. We are committed to understanding what methods can be used to open conversations about the future with wider groups of people. We believe professional futurists, technologists, scientists and policymakers also need to communicate across professional silos and engage the wider public in a more inclusive debate about the future.



[nesta.org.uk/project/next-generation-internet-engineeroom](https://nesta.org.uk/project/next-generation-internet-engineeroom)



## 6.4 Case studies

### Arts and Culture Horizon Scan

As Arts Council England prepared to develop a new ten-year strategy, they commissioned Nesta to conduct a rapid horizon scan of the operating climate for arts and cultural organisations. In the 2018 paper **Experimental Culture** we reviewed data on workforce, future audiences, new technologies and business models and interviewed thought leaders in the field to explore the challenges and opportunities of the next decade for the sector.



[nesta.org.uk/futurescoping](https://nesta.org.uk/futurescoping)

### Futures workshops

Over the past six years, Nesta has worked with partners such as the V&A and Arup on a range of futures workshops, which integrate experimental methods such as speculative design, storytelling and performance. Examples include a workshop to generate profiles of **future Londoners**, narratives about the rise of **nanosatellites** and sessions exploring possible futures for people-powered medical devices.

## Employment 2030

In 2017, Nesta published a major study on the future of skills and jobs. **The Future of Skills: Employment in 2030** was underpinned by an innovative methodology, which combined historical jobs and trends analysis, qualitative foresight workshops and quantitative machine learning techniques, in a novel way to predict which skills and jobs will be in higher demand in the future. The study's findings challenged the alarmism that holds back technology adoption, innovation and growth.



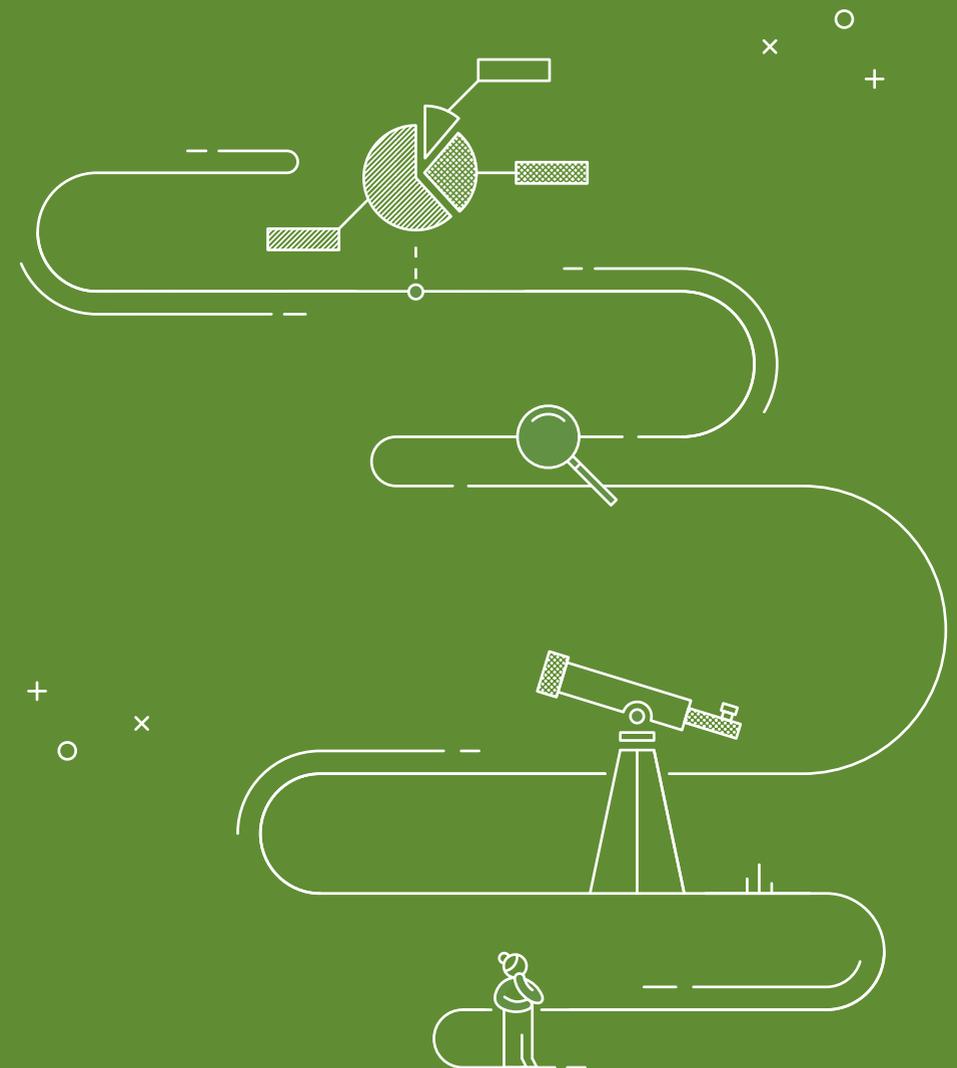
[futurefest.org](http://futurefest.org)

## FutureFest

Since 2013, Nesta's **FutureFest** has taken over 11,000 people on a multi-sensory journey to touch, feel, debate, taste and experience the future. The interdisciplinary line-up of speakers has included Edward Snowden, Vivienne Westwood, Brian Eno and Lord Martin Rees. We have also collaborated with businesses, research bodies, artists, communities, design studios and universities to provide a platform for installations and immersive experiences like 'Neurosis' (a neurological thrill ride) and the Fertility Shop of the Future.

### Right

Gemma Cairney and Akala at FutureFest 2019. Image: Beth Crockett.



## Further resources



### Report

#### Connected Councils (2016)

[nesta.org.uk/report/connected-councils-a-digital-vision-of-local-government-in-2025](https://www.nesta.org.uk/report/connected-councils-a-digital-vision-of-local-government-in-2025)

#### Don't stop thinking about tomorrow: a modest defence of futurology (2013)

[nesta.org.uk/report/dont-stop-thinking-about-tomorrow-a-modest-defence-of-futurology](https://www.nesta.org.uk/report/dont-stop-thinking-about-tomorrow-a-modest-defence-of-futurology)

#### Experimental Culture (2018)

[nesta.org.uk/report/experimental-culture-a-horizon-scan-for-the-arts-and-culture-sector](https://www.nesta.org.uk/report/experimental-culture-a-horizon-scan-for-the-arts-and-culture-sector)

#### Future Skills (2017)

[nesta.org.uk/report/the-future-of-skills-employment-in-2030](https://www.nesta.org.uk/report/the-future-of-skills-employment-in-2030)

#### Global Trends

[dni.gov/index.php/global-trends-home](https://dni.gov/index.php/global-trends-home)

#### The NHS in 2030: a people-powered and knowledge-powered health system (2015)

[nesta.org.uk/report/the-nhs-in-2030-a-people-powered-and-knowledge-powered-health-system](https://www.nesta.org.uk/report/the-nhs-in-2030-a-people-powered-and-knowledge-powered-health-system)

#### The Future of Skills: Employment in 2030 (2017)

[nesta.org.uk/report/the-future-of-skills-employment-in-2030](https://www.nesta.org.uk/report/the-future-of-skills-employment-in-2030)

#### The History of Futures, Wendy Shultz, in 'The Future of Futures' 2012 Association of Professional Futurists (2012)

[lancaster.ac.uk/social-futures/wp-content/uploads/2015/08/FutureOfFutures\\_APF\\_ebook\\_E2.pdf](https://lancaster.ac.uk/social-futures/wp-content/uploads/2015/08/FutureOfFutures_APF_ebook_E2.pdf)



### Blog

#### Seven facts about nanosatellites (2015)

[nesta.org.uk/blog/seven-facts-about-nanosatellites](https://www.nesta.org.uk/blog/seven-facts-about-nanosatellites)



### Projects and partners

#### Centre for Strategic Futures

[csf.gov.sg](https://csf.gov.sg)

#### FutureFest

[futurefest.org](https://futurefest.org)

#### Future Londoners

[nesta.org.uk/feature/future-londoners](https://www.nesta.org.uk/feature/future-londoners)

#### Futures workshops

[nesta.org.uk/futurescoping](https://www.nesta.org.uk/futurescoping)

#### Next Generation Internet – Engineroom

[nesta.org.uk/project/next-generation-internet-engineroom](https://www.nesta.org.uk/project/next-generation-internet-engineroom)

#### RAND

[rand.org](https://rand.org)

## Section 7

# Impact investment

Impact investment seeks to deliver positive social and/or environmental benefits alongside financial returns by providing capital to organisations that develop products and services, or that use their operational infrastructure to make a positive difference to society or the environment.



## 7.1

# How does impact investment work?

**In impact investment, just like mainstream investment, financial capital is invested in a company with the expectation of financial return. However, at the same time, a commitment is made to specify and measure the social and/or environmental impact created through the investment. The impact investment market encompasses a diverse array of organisations and practices.**

The term 'impact investing' has been in circulation since around 2007. It was once referred to as a new asset class, but is now thought of as a strategy that can be used in relation to multiple different types of capital. Advocates of impact investing consider it to be distinct from related activities like Responsible Investment (RI) and ESG Investing (which considers environmental, social and governance factors of the investment supply chain), on the basis that these forms of investment do not deliberately target certain forms of impact, nor measure them.

A landmark in the development of impact investing was the dedication of the UK's 2014 presidency of the G8 to the development of social impact investing. This provided a platform for international engagement on the main principles and practices of this emerging field. Since then, a Global Steering Group has been set up, which works to establish National Advisory Boards (NAB) in countries across the world. There are now 16 NABs globally. Several sector bodies have been set up to help build the market, such as the [Global Impact Investing Network \(GIIN\)](https://www.giin.org).



[thegiin.org](https://www.giin.org)

It continues to be a challenge to define exactly what counts as impact investing, and it is taking time for substantial data sets to be developed that give an accurate picture of the scale of impact investing globally. The GIIN's 2018 *Annual Impact Investor Survey* provides a benchmark: it identifies over US\$ 228 billion managed by 229 organisations.

Given its nature as a strategy across multiple forms of capital, there is no one way of doing impact investing. Just like conventional investing, different types of investments entail different relationships between investor and investee. For example, some investors make debt-based investments to large numbers of companies and have relatively low levels of engagement with any individual borrower. In contrast, investors using a private equity model become very involved in the running of the company, often joining the Board and requiring regular reporting of progress across financial and impact key performance indicators (KPIs).

The recipients of impact investment can take almost any form, from charities through to for-profit businesses. Expected returns also vary across the impact investing market. Some investors choose to target market-rate returns alongside impact. Others target lower rates of return. These decisions reflect the kinds of impact being targeted, as well as the mission of the organisation holding the capital, and institutional requirements or responsibilities such as fiduciary duty. Unsurprisingly, given this level of variation in what impact investment activity looks like, there is also considerable variation in the systems that investors and investees create to measure and manage impact. Work is ongoing, through initiatives such as the [Impact Management Project](https://www.impactmanagementproject.com), to consolidate approaches to capturing impact data and using it to inform decision-making.



[impactmanagementproject.com](https://www.impactmanagementproject.com)



## 7.2

# Nesta's work on impact investment

**Nesta invests in high impact innovations run by outstanding entrepreneurs through our investment arm, Nesta Impact Investments. We also champion and support the wider impact investment movement through research and support for other funders.**

Nesta has actively used investment as a tool to support innovation since it was first established in 1998. In the late 2000s, we saw the potential to innovate in the field of investment itself by playing a leading role in the impact investment movement.

While the idea that investment can be a force for good is not new in itself, the concept of building a deep understanding of the social and environmental implications of investment actions – and changing investment strategies based on this understanding – has the potential to transform society if applied widely.

Seeing the potential for this idea, in 2011 Nesta published [Twenty Catalytic Investments to Grow the Social Investment Market](#). This research looked at how it could be delivered and evidenced. We provided grants to help some of the early market participants get off the ground, including Bridges Impact Foundation and invested in the funds and management companies of emerging impact investors including Big Issue Invest and Bethnal Green Ventures. At the same time, we started making our own direct impact investments through [Nesta Impact Investments](#).



[nesta.org.uk/project/impact-investments](https://www.nesta.org.uk/project/impact-investments)

With the support of Big Society Capital and Omidyar Network, Nesta launched a £17.6 million investment fund with the core objective to fund the creation of new innovations addressing inequality in the fields of health and wellbeing, education and employability, and the social and environmental sustainability of communities.

To date, Nesta Impact Investments has invested in 13 companies and one social impact bond. Each of these investments aims to achieve a commercial rate of return alongside evidenced positive social impact. Nesta Impact Investments is managed by Nesta's fund management arm, Nesta Investment Management, with funding from Big Society Capital, Omidyar Network and Nesta itself.

We continue to work with practitioners to develop and test evidence standards for impact investment, while also researching and commenting on major issues in the development of the market. For example, in 2017, our report [Setting Our Sights: A strategy for maximising social impact](#) set out to share insights and understanding about the impact of a diverse portfolio and explore how social impact can be embedded into commercial businesses.



## 7.3

## Case studies



[oomph-wellness.org](http://oomph-wellness.org)

### Oomph! Wellness Limited

Starting in 2016, Nesta Impact Investments made two separate investments in Oomph! Wellness Limited, a company with the impact objective to increase the number of older people enjoying a higher quality of life. Oomph! provides wellbeing leadership training for care providers, as well as excursion services for care home groups to get elderly residents out and about on regular and meaningful outings.

Since investing in Oomph!, the company has launched a radical new excursion offering for older and vulnerable adults in care, a new minibus service, trained 1,588 staff, delivered 59,575 sessions per year, and is enjoying significant growth in its activity and exercise franchise. The investments are associated with a 14 per cent improvement in quality of life for beneficiaries as measured by clinical quality assessment tools.



[arbor-education.com](http://arbor-education.com)

### Arbor Education

In 2014, Nesta Impact Investments invested in Arbor Education, a company with the impact objective to improve educational outcomes for children and young people. Arbor Education helps schools learn from their data by providing data analysis solutions to identify the trends in student performance and areas for improvement. Arbor Education uses the data to develop relevant workflow tools for teachers to act and improve outcomes.

Following a seed-round of investment from Nesta, Arbor's strong performance, and their development of high-quality products, resulted in a 70 per cent increase in the value of the initial investment.

## Further resources



### Report

**Going Digital: Five lessons for charities developing technology-based innovations (2014)**

[nesta.org.uk/report/going-digital-five-lessons-for-charities-developing-technologybased-innovations](https://www.nesta.org.uk/report/going-digital-five-lessons-for-charities-developing-technologybased-innovations)

**Impact Investing Top Tips (2015)**

[nesta.org.uk/report/impact-investing-top-tips](https://www.nesta.org.uk/report/impact-investing-top-tips)

**Impact Measurement in Impact Investing (2015)**

[nesta.org.uk/report/impact-measurement-in-impact-investing](https://www.nesta.org.uk/report/impact-measurement-in-impact-investing)

**Nesta Impact Investments Annual Report: April 2016 – March 2017 (2017)**

[nesta.org.uk/report/nesta-impact-investments-annual-report](https://www.nesta.org.uk/report/nesta-impact-investments-annual-report)

**Setting Our Sights: A strategy for maximising social impact (2017)**

[nesta.org.uk/report/setting-our-sights-a-strategy-for-maximising-social-impact](https://www.nesta.org.uk/report/setting-our-sights-a-strategy-for-maximising-social-impact)

**Standards of Evidence for Impact Investing (2012)**

[nesta.org.uk/report/standards-of-evidence-for-impact-investing](https://www.nesta.org.uk/report/standards-of-evidence-for-impact-investing)

**Twenty Catalytic Investments to Grow the Social Investment Market (2011)**

[nesta.org.uk/report/twenty-catalytic-investments-to-grow-the-social-investment-market](https://www.nesta.org.uk/report/twenty-catalytic-investments-to-grow-the-social-investment-market)



### Blog

**Five lessons from five years of impact investing (2017)**

[nesta.org.uk/blog/five-lessons-from-five-years-of-impact-investing](https://www.nesta.org.uk/blog/five-lessons-from-five-years-of-impact-investing)



### Projects and partners

**Arbor Education**

[arbor-education.com](https://www.arbor-education.com)

**Arts Impact Fund**

[artsculturefinance.org/our-funds/arts-impact-fund](https://www.artsculturefinance.org/our-funds/arts-impact-fund)

**Big Society Capital**

[bigsocietycapital.com](https://www.bigsocietycapital.com)

**Impact Management Project**

[impactmanagementproject.com](https://www.impactmanagementproject.com)

**Nesta Impact Investments**

[nesta.org.uk/project/impact-investments](https://www.nesta.org.uk/project/impact-investments)

**Omidyar Network**

[omidyar.com](https://www.omidyar.com)

**Oomph! Wellness Limited**

[oomph-wellness.org](https://www.oomph-wellness.org)

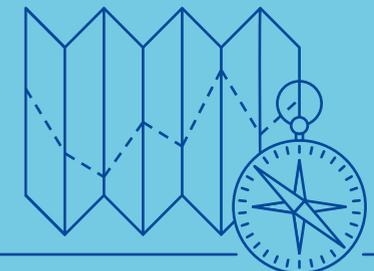
**The Global Impact Investing Network (GIIN)**

[thegiin.org](https://www.thegiin.org)

## Section 8

# Innovation mapping

Innovation mapping uses new data sources, data science methods and visualisation tools to help policymakers navigate complex innovation systems, helping answer questions such as “Where is innovation happening? Who is doing it? What do we do about it?” with unprecedented levels of precision and timeliness.



## 8.1

## How does innovation mapping work?

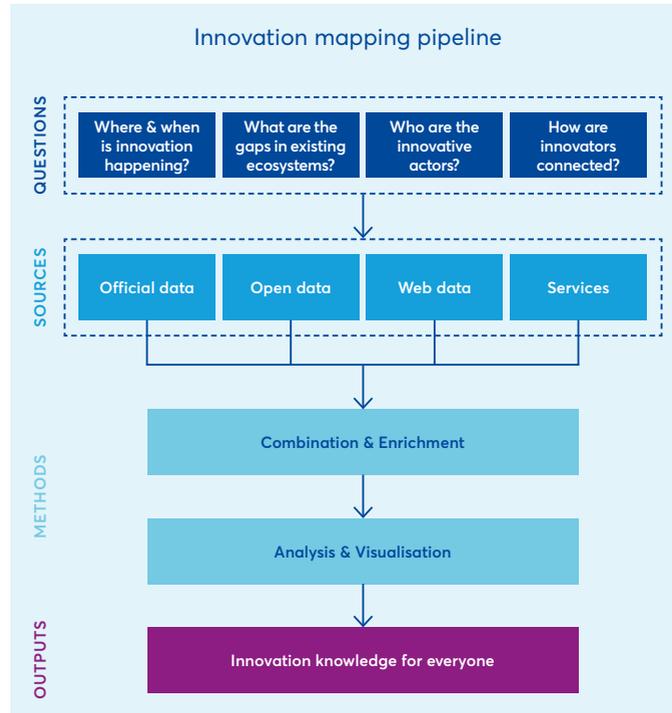
**A community of leading-edge researchers and companies are using new techniques to measure and map innovation.**

Here are some of the tools we use in our work at Nesta:

- We identify burning policy questions and evidence needs using structured methods for stakeholder engagement. In our project, mapping health innovation, this involved developing user personas that have guided us through data collection, analysis and visualisation.
- We collect data from business websites, open repositories about scientific research and social media websites to get a timelier and more detailed picture of how innovation happens. For example, our map of the Immersive Economy of the UK identified companies using Virtual Reality and Augmented Reality technologies through the descriptions in their websites.
- We analyse millions of descriptions of innovation using Natural Language Processing (NLP) methods to better understand the technologies used and the problems addressed. We recently used this approach to identify AI research in a repository with hundreds of thousands of papers, which we then mapped to identify hotspots of AI R&D activity.
- We use network science to visualise the structure of collaboration networks, identify gaps between communities and recommend interventions to encourage the exchange of ideas. In [Creative Nation](#), this helped to understand networks of collaboration between universities and creative businesses across the UK.

- We present the findings using interactive visualisations that help users answer their own questions and drill down into those locations and sectors that interest them most. (For example, see the Arloesiadur case study on page 82.)

**Fig. 10**  
Nesta's innovation mapping pipeline



## 8.2

# Nesta's work on innovation mapping

**Nesta is attempting to transform innovation policy with new data sources, analytic methods and ways of communicating insights. This is an area where we are quickly developing a track record of original research.**

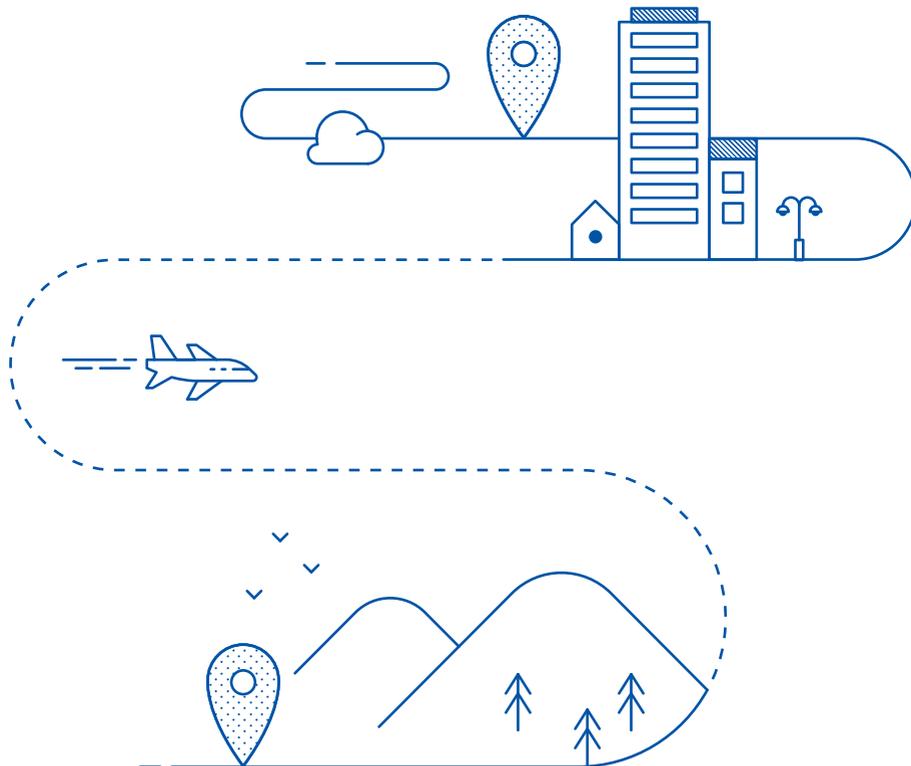
In 2010, Nesta published the research report, [Creative Clusters and Innovation: putting creativity on the map](#), which mapped the UK's creative clusters. This showed where they are located geographically, which sectors form them, and what their role is in the wider innovation ecosystem.

In 2014, we created [A Map of the UK Games Industry](#). Here, a big data approach was used to measure and map the UK games industry and track its evolution over time. It found that the games industry is much larger than previously thought – almost 2,000 games companies in 12 key hubs of game-making activity were mapped across the UK.

Later in 2016, we developed [The Geography of Creativity in the UK](#) report, in partnership with Creative England. This study found that creative industries are increasingly important to local economies across the UK and mapped the 47 main creative clusters, helping to identify that there was a 28 per cent growth in creative employment between 2007 and 2014.

In the same year, Nesta and Tech City, in partnership with Growth Intelligence, published the [Tech Nation](#) report, providing a comprehensive analysis of the UK's digital tech industries. To gain comprehensive insight into digital employment, we analysed government data, job advertisements, and official ONS data. This data helped map the impact of the digital technology economy on wider business, employment, and economic trends.

Nesta's ongoing work focuses on mapping new sectors. In the UK, Nesta has a project called Mapping Innovation in Scotland, with Scottish Government. Globally, we analyse health innovation with support from the Robert Wood Johnson Foundation and also map the Artificial Intelligence R&D landscape. To support this, our innovation mapping team continues to grow – with an interdisciplinary team of data scientists, data developers, data visualisation designers and innovation experts at the forefront of using data for innovation policy.



## 8.3 Case studies

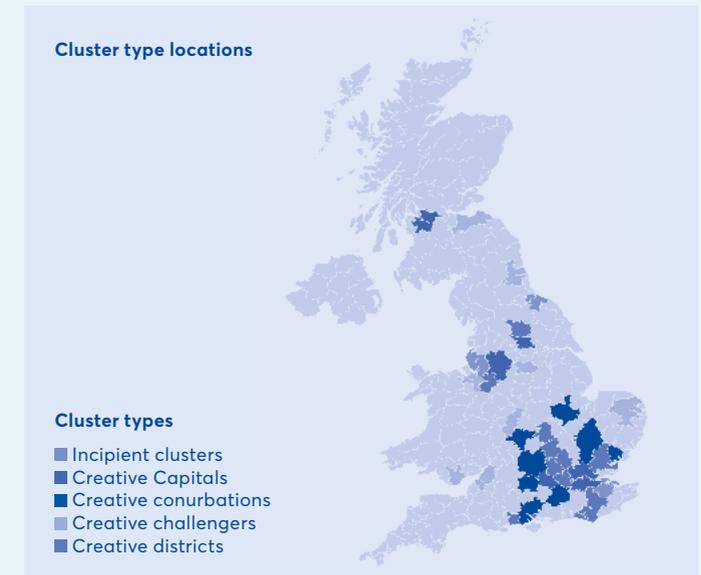
### Creative Nation

In early 2018, Nesta launched Creative Nation, the latest output in a long line of projects mapping the creative industries in the UK. As part of this, Nesta published a report, an interactive visualisation and an open dataset to maximise the usefulness of the work for many different audiences. The analysis in Creative Nation has helped unlock £64 million of investment in the creative industries from the Government's Industrial Strategy Challenge Fund. The report presents eight key findings based on our analysis of the data, and is accompanied by an open dataset and **interactive visualisation** to help anybody explore the data.



[data-viz.nesta.org.uk/creative-nation](https://data-viz.nesta.org.uk/creative-nation)

**Fig. 11**  
Creative Nation map





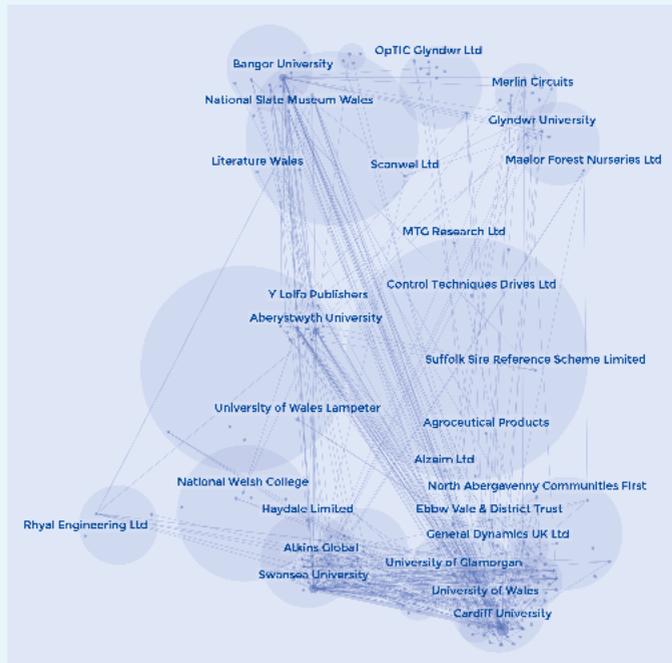
arloesiadur.org

## Arloesiadur

Arloesiadur is a collaboration between Nesta and the Welsh Government to map innovation in Wales. We have used new data to measure and visualise Wales' industry, research and tech networks with the goal of informing government policies that drive growth.

Economists and policymakers recognise that innovation is one of the main ways to address the big challenges of our time. But to support innovation, we first need to understand it. In Arloesiadur (meaning 'Innovation Directory' in Welsh), Nesta has tried to create this data by using new data sources, data science methods and visualisations about industrial, tech networking and research activity in Wales. In doing so, we aim to answer big questions about Wales' industrial and research strengths, its collaboration networks and future economic opportunities.

**Fig. 12**  
Research collaboration  
networks in Wales:  
arloesiadur.org



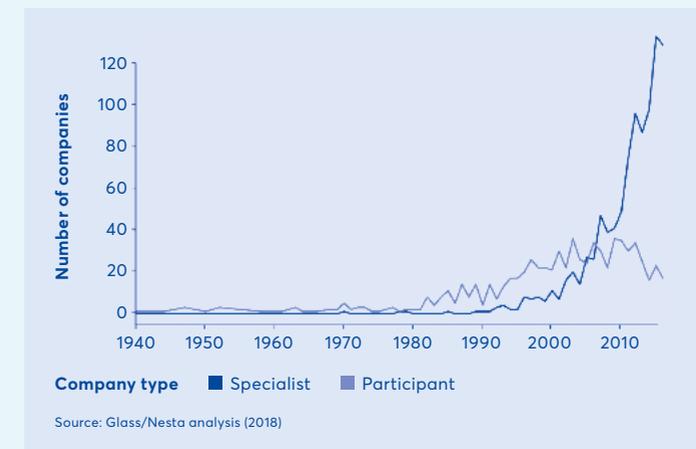
## The Immersive Economy in the UK

In 2018, we launched **The Immersive Economy in the UK**. This report, commissioned by Immerse UK with funding from Innovate UK, provides hard data about the size of the sector, its performance, its geography, the drivers of success and the barriers to growth. Information was gathered and analysed by Nesta, with help from Glass – a startup with expertise in text mining from websites – and from strategy and research consultancy MTM London, through a combination of machine learning, a business survey and in-depth interviews.

Our analysis showed that immersive is already an economic reality in the UK, with around 1,000 immersive specialist companies in the UK employing around 4,500 people and generating £660 million in sales, potentially representing as much as 9 per cent of the global market share. We also showed that although much of the immersive activity is concentrated in London, there are hotspots of activity across the UK, including hotspots in Brighton, Bristol, Newcastle, Liverpool, Manchester, Cambridge, Oxford and Edinburgh.

The analysis in the report is providing a valuable evidence base for ongoing policy interventions to support the immersive economy in the UK, including through the Audiences of the Future Industrial Strategy Challenge Fund.

**Fig. 13**  
Number of specialist  
and participating  
immersive companies  
incorporated by year



## Further resources



### Report

**A Map of the UK Games Industry (2014)**  
[nesta.org.uk/report/a-map-of-the-uk-games-industry](https://www.nesta.org.uk/report/a-map-of-the-uk-games-industry)

**Creative Clusters and Innovation: putting creativity on the map (2010)**  
[media.nesta.org.uk/documents/creative\\_clusters\\_and\\_innovation.pdf](https://media.nesta.org.uk/documents/creative_clusters_and_innovation.pdf)

**The Geography of Creativity in the UK (2010)**  
[nesta.org.uk/report/the-geography-of-creativity-in-the-uk](https://www.nesta.org.uk/report/the-geography-of-creativity-in-the-uk)

**Tech Nation (2016)**  
[nesta.org.uk/report/tech-nation-2016](https://www.nesta.org.uk/report/tech-nation-2016)



### Blog

**Creative Nation open data (2018)**  
[nesta.org.uk/blog/creative-nation-data](https://www.nesta.org.uk/blog/creative-nation-data)

**Illuminating the health innovation landscape (2018)**  
[nesta.org.uk/blog/illuminating-health-innovation-landscape](https://www.nesta.org.uk/blog/illuminating-health-innovation-landscape)

**Mapping a Creative Nation (2018)**  
[nesta.org.uk/blog/mapping-a-creative-nation](https://www.nesta.org.uk/blog/mapping-a-creative-nation)

**We are building a formidable system for measuring science – but what about innovation? (2017)**  
[nesta.org.uk/blog/we-are-building-a-formidable-system-for-measuring-science-but-what-about-innovation](https://www.nesta.org.uk/blog/we-are-building-a-formidable-system-for-measuring-science-but-what-about-innovation)



## Section 9

# People Powered Results: the 100 day challenge

The 100 day challenge is a structured innovation process, combined with coaching support. It enables frontline staff from across a public services system to collaborate and rapidly experiment with new ways of working, to achieve better results for people and communities.



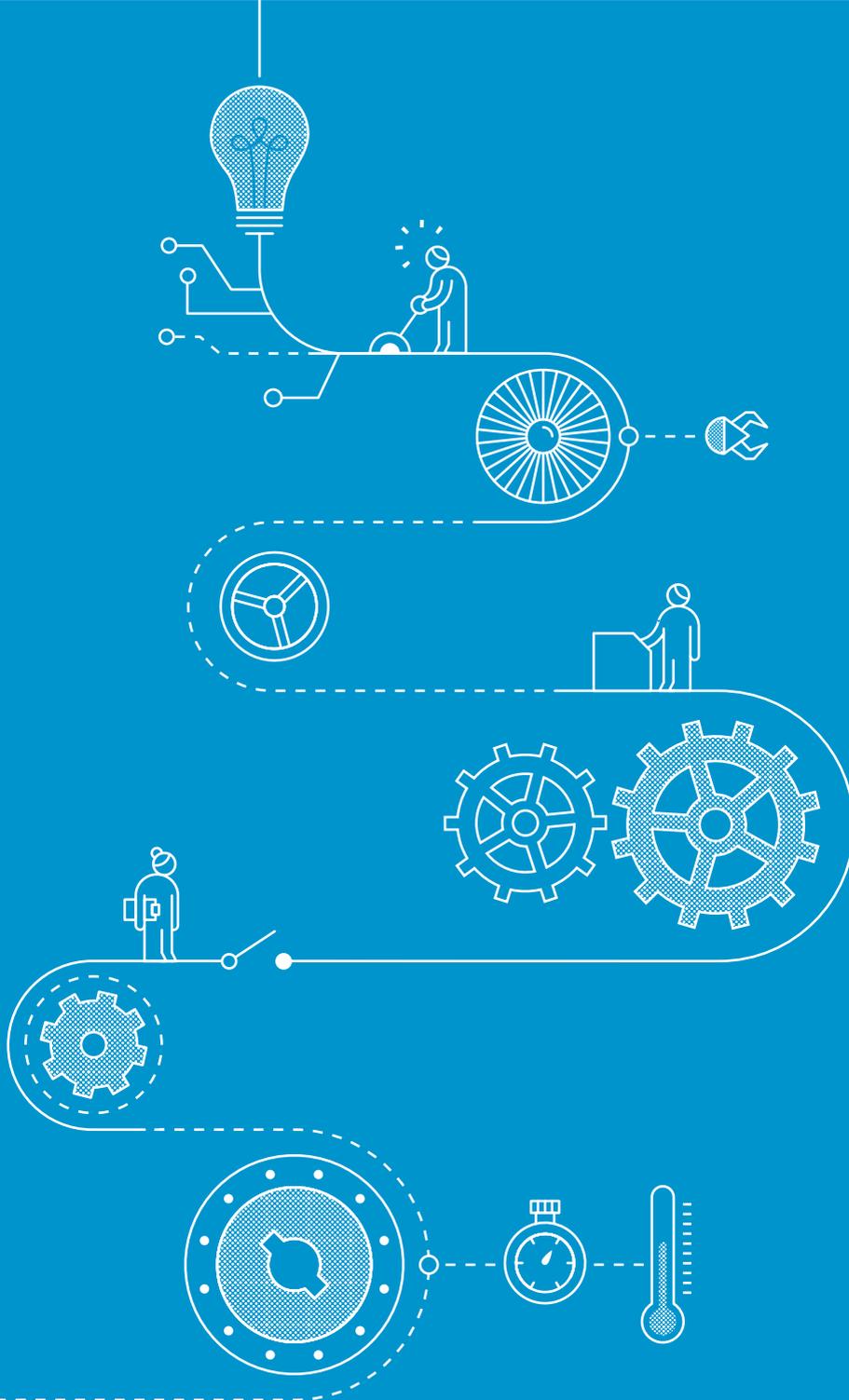
## 9.1

## How does the 100 day challenge work?

**Frontline practitioners and people who use public services have unrivalled expertise in how the system operates, but often have little influence or ownership over change. This approach empowers and connects those closest to delivery, to drive change, over 100 days.**

Empowering those on the frontline not only brings a renewed energy and power for change across a system, but also brings a detailed level of insight into the real issues and challenges that are faced by a system, to inform longer-term strategic ambitions and plans.

100 day challenges are intensive periods of action and collaboration that typically involve representatives from health, social care and voluntary organisations. System and organisational leaders are supported to break down longer-term strategies into challenges with measurable objectives. Frontline practitioners and citizens set ambitious goals and develop and test creative solutions in real conditions.



The approach draws upon and combines the best aspects of evidence-based leadership and change management theories, and theories used in other fields including:

- **Design** Human-centred design and user-led innovation.
- **Leadership development practice** Adaptive and Network leadership.
- **Quality Improvement** Plan-Do-Study-Act, and Evidence-based practice.
- **Group dynamics and team effectiveness** Deploying a range of facilitation and coaching, and behaviour change techniques.

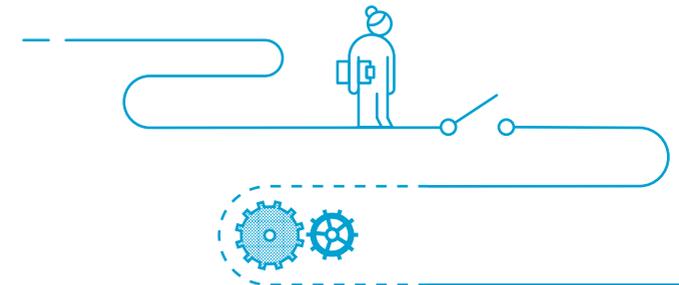
The approach creates the conditions for successful innovation in complex systems, as set out below:

**Fig. 14**  
100 Day Challenge  
Conditions created



The 100 day challenge method works best on complex/wicked issues, which require collaboration across organisational and professional boundaries, and a range of interventions to be tested simultaneously. Over the past few years we have been testing the applicability of the approach to tackle the following issues in the healthcare system:

- Improving care and support within a community setting to reduce unplanned hospital admissions.
- Improving approaches to hospital discharge to reduce avoidable delays.
- Supporting areas to develop proactive approaches for those at risk of developing long-term conditions – such as diabetes.
- Working nationally to reduce the rising demand for elective care – helping to make sure that people see the right person, in the right place, first time.
- Supporting health systems to develop and scale person and community-centred approaches, through place-based/ neighbourhood working.





## 9.3 Nesta's work on the People Powered Results 100 Day Challenge

**In 2015, Nesta, working in partnership with Rapid Results Institute, pioneered the People Powered Results '100 Day Challenge' method in the UK health and care system. Since then, it has successfully generated new ideas about how to improve care for older people, reduce unplanned hospital admissions, improve discharge from hospitals and even helped develop a new preventative care process for people at risk. Our first challenge started in Essex in 2015; over the past two years the team's work has spread across England.**

Since 2015, the People Powered Results team has worked directly with over 63 frontline teams across 17 local places. Alongside this we have built the capacity within local and national transformation teams to enable the approach to be used in a further 15 local places.

We have used the method to tackle some of the most complex challenges faced by the UK health and care system. In 2017, we partnered with NHS England to apply the method to testing and implementing personalised care, including [Integrated Personal Commissioning](#), and to support the transformation of elective care services.

In the same year, we worked across the country, including in Hertfordshire, Stockton, Bolton and Tameside, to mobilise frontline teams to place people at the centre of their own care and improve outcomes for frail older patients, people with diabetes and those in the last years of life.

This work put into practice from Nesta's wider work on People Powered Health. This includes Realising the Value, a programme which was funded by NHS England and led by Nesta and a consortium of organisations including the Health Foundation and Voluntary Voices. The programme developed evidence and practice, which enables people to take an active role in their own health and care.



[england.nhs.uk/ipc](https://england.nhs.uk/ipc)

## 9.4 Case studies

### Rapid Results Institute (RRI) Pilot Programme: West, Mid and South Essex

From 2015 to 2017, Nesta and the RRI worked together to address the challenge to improve outcomes for frail older people, by integrating the provision of care. A team of frontline professionals were brought together to address questions including: how to transform the care and support system (to prevent people going into hospital on an unplanned basis), how to assess when patients need hospital services and how to work with people to reduce their risk factors against diabetes.

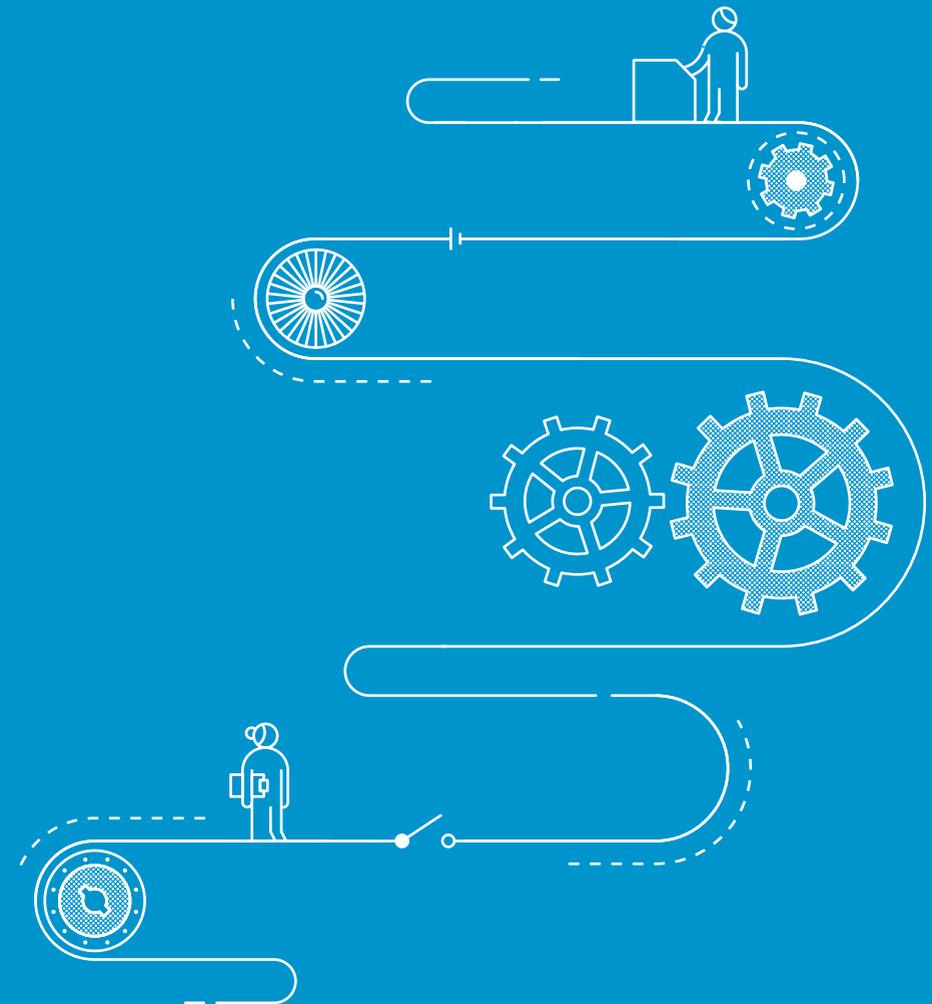
By testing a new commissioning approach for frailty, the work led to a 40 per cent reduction in unplanned admissions in the first cycle 'model month' and was recognised by the clinical commissioning group as the only local scheme to show a real reduction in unplanned activity. As a result, the work grew in scale and quality and received a national award for improving outcomes in the frail population.

### NHS England's Elective Care Transformation Programme: Transforming Gastroenterology Elective Care

In 2017, the NHS England Strategy Group brought together local systems, including leaders, clinicians and patients, to design and test innovative ways to transform elective care services. Teams were encouraged to rethink referrals, maximise shared decision-making and self-management support, and transform outpatient services.

In Somerset, to address the theme of rethinking referrals, the team tested whether a telephone-based advice and guidance service for GPs to access advice from local specialists and triage referrals could reduce the number of inappropriate referrals. Tested in 71 GP practices across Somerset, at Day 100 a referral was avoided in 54 per cent of the calls from GPs. In Stockport, a referral was avoided in 48 per cent of calls from GPs who could access real-time advice from specialists. By triaging referrals, patients received the most appropriate and effective treatment for them.

Meanwhile in Stockport, the team used the 300-day method to transform outpatient care and improve access to care for people with Inflammatory Bowel Disease (IBD). By providing patients with direct access to phone advice and regular weekly appointment slots during flare-ups, the team reduced the average waiting time for a hospital outpatient appointment. Patients' needs were also better met by creating a 'one-stop' clinic, jointly run by clinicians and diagnostic services.



## Further resources



### Blog

**West Essex 100 Day Challenge (2018)**  
[nesta.org.uk/blog/west-essex-100-day-challenge](https://nesta.org.uk/blog/west-essex-100-day-challenge)



### Projects and partners

**Integrated Personal Commissioning**  
[england.nhs.uk/ipc](https://england.nhs.uk/ipc)

**Realising the Value**  
[nesta.org.uk/project/realising-value](https://nesta.org.uk/project/realising-value)

**The Rapid Results Institute**  
[rapidresults.org](https://rapidresults.org)



### Video

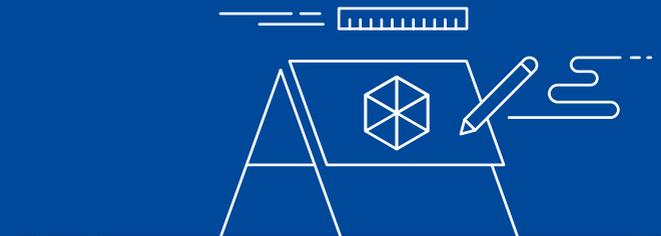
**The Mid Essex Experience (2018)**  
[vimeo.com/128243306](https://vimeo.com/128243306)



## Section 10

# Prototyping

Prototyping is a low-cost, low-risk way of developing, testing, and improving ideas at an early stage. A model version of a product or service elicits feedback and remodelling before extensive resources are committed to implementation.



## 10.1

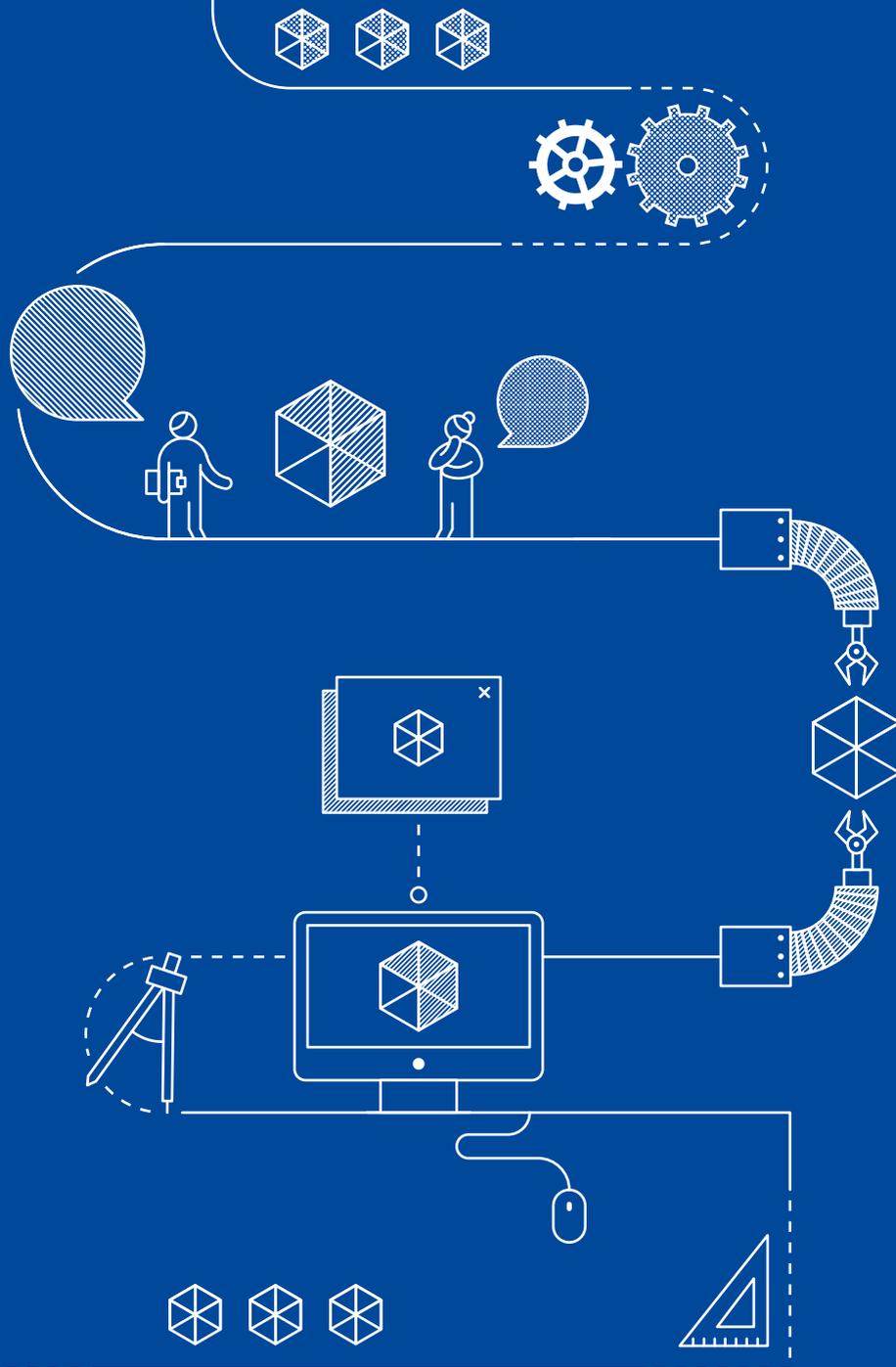
## How does prototyping work?

**Prototyping enables innovators to experiment, evaluate, learn, and adapt an idea, so they can refine it into something even better. Prototyping grants are designed to support innovators to take a structured and iterative approach to testing their new ideas and developing them as they go.**

This approach involves creating a prototype, or simple version of an idea, whether a simple cardboard model or wireframe. This is then tested with users of the ultimate product or service to understand if it works. Compared to a pilot, prototyping does not require a lot of resources and can be done within short timescales.

Historically, prototyping was an innovation method most commonly used by engineers, designers and web developers rather than the public sector. Today, however, there is a growing interest in how this approach could be adopted for the public sector and service design.

Prototyping is not an alternative to piloting. Rather, it helps build a better specification for what a pilot might be. It may even help to see that an idea isn't going to work and save the time and cost of a pilot.



## 10.2 Nesta's work on prototyping

**Nesta was an early adopter of using prototyping as a method to help innovators in the public and third sectors to design new services and products.**

Our story began in 2011 with the creation of a research report [Prototyping in Public Services](#), exploring how the practice can be used in the development of new public services. In the same year, we partnered with Barnet Council in North London to use prototyping as a method to build and test a proposed new service called 'Community Coaches'. The explicit intention behind the project was to see how prototyping could be used in practice, as a way of stimulating innovation in the public sector.

In collaboration with partners including the Innovation Unit, thinkpublic and The Young Foundation, Nesta also produced several reports and practice guides to promote the use of prototyping for the public sector – outlining what it was and how it could be used. [The Prototyping Framework](#), for example, presents a simple checklist and a visual map to guide the reader through this process.

Over the last seven years prototyping programmes have become a mainstay of our practical programmes as a foundation. The most common form of these is an R&D fund or prototyping fund, which combines grant finance for developing a new idea (building paper prototypes or minimum viable products), with expert methodological support to trial and test it in context. Grants are awarded to social ventures or to public servants trying a new method out in-house, with ample opportunity for awardees to share lessons learnt as a cohort. We set out the principles of how Nesta runs prototyping funds and awards associated grants in 2018's [Funding Innovation: a practice guide](#).

For example, between 2011–2014, Nesta set out to find and support innovations that increased the number of people who volunteer their time, money, resources or skills for good causes. The Innovation in Giving Fund, a £10 million fund supported by the Cabinet Office, prototyped 50 new ideas that made imaginative use of digital technologies.



[pennies.org.uk](http://pennies.org.uk)

The most promising ideas were given additional funds and support to grow them, with some like [Pennies](#) entering the mainstream. The electronic charity box encourages consumers to give micro-donations to charity (from 1p to 99p) when making online or card payments with a growing bank of retailers like Sainsburys. Others were tested but proved flawed, showing the usefulness of prototyping as an innovation method.



[diytoolkit.org](http://diytoolkit.org)

We have also published practical toolkits on how to invent, adapt or adopt ideas to deliver better results. The [DIY Toolkit](#) was primarily designed for busy people working in development. It includes 30 tried and tested social innovation tools including 20 on ideation and prototyping, alongside a range of case studies. The website is available in six languages and the tools have been downloaded 240,000 times.



## 10.3 Case studies



[nesta.org.uk/project/sharelab](https://nesta.org.uk/project/sharelab)

### ShareLab Fund

Launched in 2017, Nesta's ShareLab Fund supports and funds ideas that use collaborative digital platforms and innovative business models to make a real social impact. Eight organisations were funded in the first cohort, including Chatterbox who were initially focused on partnering with universities to offer conversational practice to language students using a model of draw-down credits. However, it quickly became apparent that the platform afforded the opportunity to expand their offer into different markets. We helped Chatterbox prototype a new model, matching individual learners with a refugee tutor for direct one-to-one tuition via their video conferencing feature, as well as business-focused conversational practice for corporate clients.

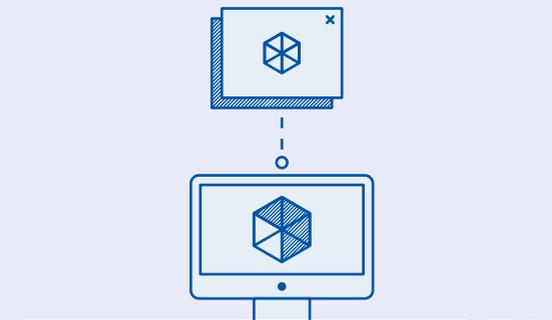
**Right**  
A Chatterbox conversation taking place



[nesta.org.uk/project/digital-rd-fund-for-the-arts](https://nesta.org.uk/project/digital-rd-fund-for-the-arts)

### Digital R&D Fund for the Arts

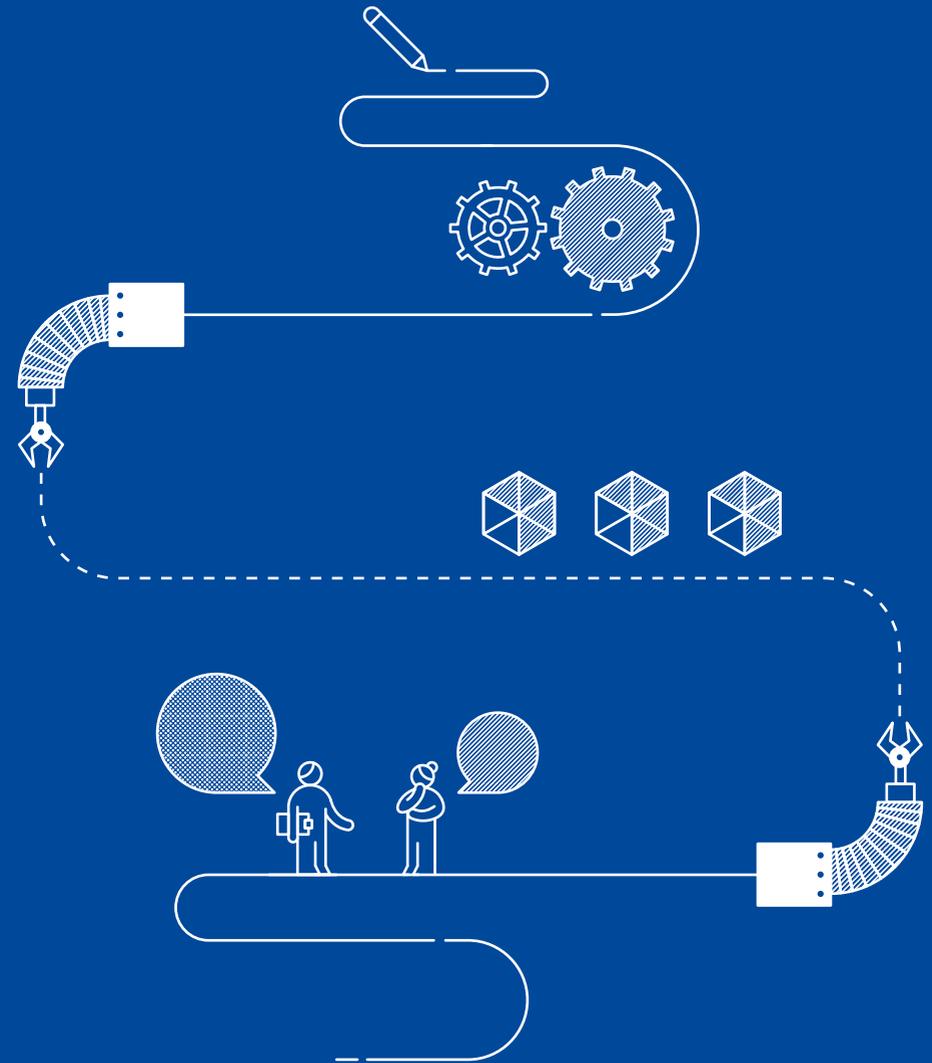
The Digital R&D Fund for the Arts supported ideas that use digital technology to build new business models and enhance audience reach, within arts and cultural organisations. It was a partnership between Nesta, Arts Council England and the Arts and Humanities Research Council (AHRC), and led to sister funds in Scotland and Wales with Creative Scotland and Arts Council of Wales. One case study from the fund is the Clapping Music app – here the London Sinfonietta and its partners developed an iOS game to engage a wider audience in the music of a contemporary composer and to help the user improve their musical skills. In Wales, Theatr Genedlaethol Cymru (the Welsh language National Theatre of Wales) developed Sibrwd – a companion app that allowed non-Welsh speakers to be guided and supported through Welsh language productions by whispering contextual information in their ear while a performance is in progress. The R&D fund allowed them to test different types of support – pace, regularity and types of content – to ensure people could follow productions effectively.



### Creative Councils programme

The Creative Councils programme was a prototyping fund that invited councils to submit ideas for tackling long-term challenges that mattered to their communities. The 17 councils selected to participate used prototyping to design and then implement radical solutions for public service issues they struggled with. These ranged from 'The Deal' in Wigan, which looked at how it might create a new economic model for social care by harnessing untapped resources in the local community, to work in Stoke, which aimed to make the city energy self-sufficient by moving towards local ownership of energy supply. As a result, we learned about the approaches, skills and capabilities needed to successfully innovate in local government and shared these in our end of programme report.

We also shared the learning from the Creative Councils programme with our partners at Bloomberg Philanthropies, who subsequently launched the Mayors Challenge in the United States and then across Europe using a similar approach. Over 300 cities participated in the US programme, with the winner of the Mayors Grand Prize for Innovation, Providence, Rhode Island, receiving a \$5 million implementation award for its cutting-edge early education initiative. The European competition was won by Barcelona, which received €5 million toward its proposal to create a digital and community 'trust network' for at-risk older residents.



## Further resources



### Toolkit

#### **Creative Enterprise Toolkit (2007)**

[nesta.org.uk/toolkit/creative-enterprise-toolkit](https://www.nesta.org.uk/toolkit/creative-enterprise-toolkit)

#### **Designing for Public Services, a practical guide (Nesta and Ideo) (2017)**

[nesta.org.uk/toolkit/designing-for-public-services-a-practical-guide](https://www.nesta.org.uk/toolkit/designing-for-public-services-a-practical-guide)

#### **DIY Toolkit (2014)**

[diytoolkit.org](https://diytoolkit.org)

#### **Funding Innovation: a practice guide (2018)**

[nesta.org.uk/toolkit/funding-innovation-practice-guide](https://www.nesta.org.uk/toolkit/funding-innovation-practice-guide)



### Report

#### **Prototyping Framework (2013)**

[nesta.org.uk/publications/prototyping-framework](https://www.nesta.org.uk/publications/prototyping-framework)

#### **Prototyping in Public Services (2011)**

[nesta.org.uk/report/prototyping-in-public-services](https://www.nesta.org.uk/report/prototyping-in-public-services)



### Blog

#### **What is prototyping? (2011)**

[nesta.org.uk/blog/what-is-prototyping](https://www.nesta.org.uk/blog/what-is-prototyping)



### Projects and partners

#### **Creative Councils**

[nesta.org.uk/project/creative-councils](https://www.nesta.org.uk/project/creative-councils)

#### **Digital R&D Fund for the Arts**

[nesta.org.uk/project/digital-rd-fund-for-the-arts](https://www.nesta.org.uk/project/digital-rd-fund-for-the-arts)

#### **Innovation in Giving Fund**

[nesta.org.uk/project/innovation-giving-fund](https://www.nesta.org.uk/project/innovation-giving-fund)

#### **Pennies**

[pennies.org.uk](https://pennies.org.uk)

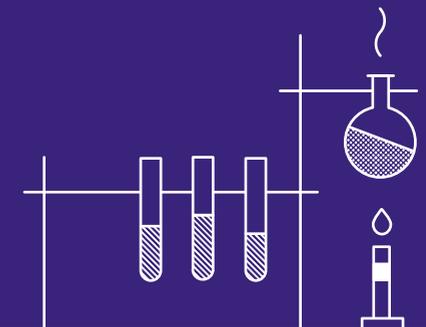
#### **ShareLab**

[nesta.org.uk/project/sharelab](https://www.nesta.org.uk/project/sharelab)

## Section 11

# Public and social innovation labs

Public and social innovation labs are teams, units and funds dedicated to structuring and embedding innovation methods and practice in government to tackle social and public problems.



## 11.1

## How do public and social innovation labs work?

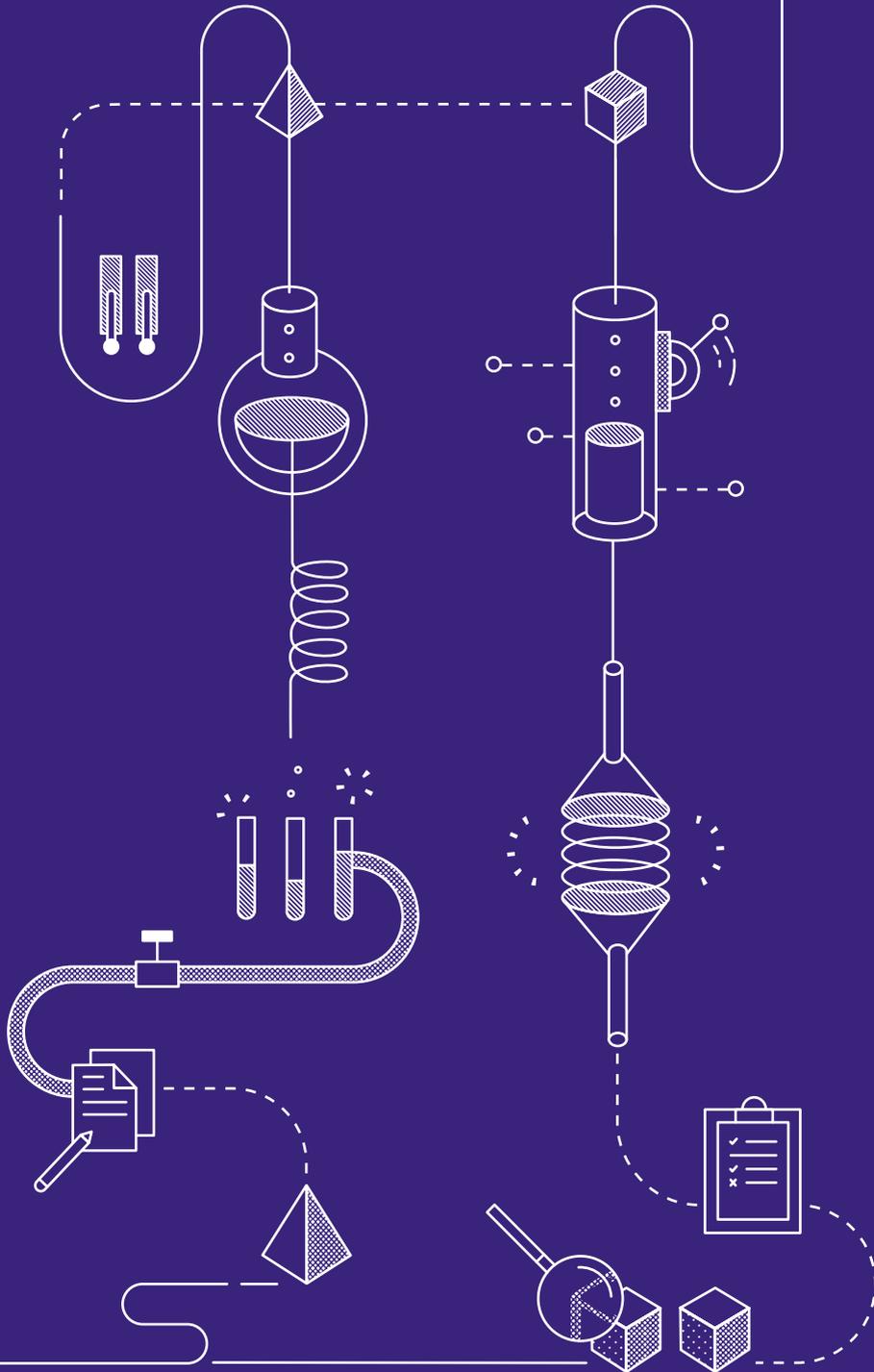
**Innovation labs come in a variety of formats but, while they may differ in size and in the types of tools and resources they have access to, they typically use experimental innovation methods to tackle both social and public issues.**

The approach typically includes:

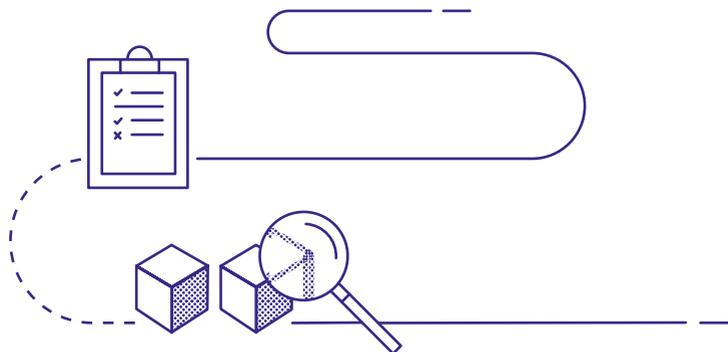
- Scanning for and identifying key issues, priorities and tasks.
- Developing ideas that impact on these areas.
- Testing and prototyping solutions.
- Creating new entry points or routes to drive systems change or have a greater impact.

Innovation labs are distinguished by:

- The methods they use, such as design, data, or behavioural economics.
- The field in which they work, such as education or healthcare.
- Where they focus their efforts, from upstream to downstream, in the innovation process; from understanding issues, through to generating ideas to implementation and scale.
- How they work, with some innovating in practice, such as by undertaking experiments or using open innovation methods, to those who primarily support and fund others.
- The extent to which they are directly involved with government, from being based inside to operating at arm's length, to others that are entirely separate.



Public and social innovation labs have rapidly moved from margin to mainstream over the past decade. As part of this, governments have been institutionalising innovation for a number of years. Examples include Minnesota in the US, which had an innovation unit for some time, to Amsterdam's various teams pioneering the use of digital technologies in cities, to New York's Center for Court Innovation. Although it did not label itself as an innovation team at the time, the UK's Social Exclusion Unit in the late 1990s also functioned as a lab. It worked with a wide group of stakeholders, including people directly affected by the social problems it sought to address, such as teenage pregnancy or neighbourhood decline; it used rapid prototyping; it had a strong emphasis on data and holistic solutions; and it achieved impressive results, such as dramatic declines in street homelessness.



## 11.2

# Nesta's work on public and social innovation labs

**Nesta has a lot of experience in public and social innovation labs, both studying them and designing and running them.**

Through our research, we have studied them around the world, seeking to understand the methods used to create change and improve an organisation's innovative capabilities.

In 2010, we co-authored [The Open Book of Social Innovation](#) with The Young Foundation. Part of a wider series, the report was a first step towards developing the knowledge base about the ways to design and grow innovation. Subsequently, in 2014, we partnered with Bloomberg Philanthropies to create the [i-teams](#) report. This global study told the story of 20 government teams and units charged with making innovation happen and explored their impact.

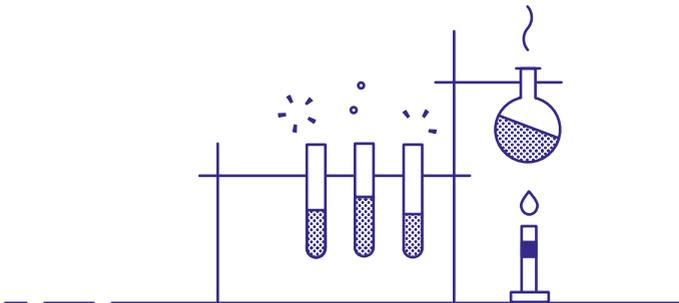
In the early 2000s, we set up Futurelab to deliver and develop innovative approaches to education. We also partnered with the Cabinet Office to set up the Behavioural Insights Team in 2014. One of the UK government's most successful innovation labs, it uses behavioural tools to make better policy. Later in 2015, we partnered with Cardiff University to launch Y Lab, a public services innovation lab for Wales that works with Welsh policymakers and practitioners.

From 2009 to 2017, Nesta's own internal Innovation Lab supported people to develop ideas to solve social challenges using a range of approaches, such as grant funding, challenge prizes and practical programmes combined with wider policy and systems change. This has included the launch of the [Digital Makers Fund](#), a programme that backed ideas to get young people involved in digital activities like coding, and the [Centre for Social Action Innovation Fund](#), a £14 million fund to support the growth of innovations that mobilise people's energy and talents to help each other, working alongside public services.

We have also sought to collaborate with other labs around the world to share learnings. We are part of the Social Innovation Exchange (SIX) and, in 2015, Nesta hosted the first Labworks. This global gathering brought together the growing network of teams driving forward public service innovation to meet face-to-face, sharing knowledge, experience and forming relationships.

As part of our ongoing work in this area, Nesta's Innovation Skills team also provides direct, practical support to government labs and teams to further their development. We have provided both advisory and skills training to the national innovation labs of Chile, Colombia, Portugal and the United Arab Emirates. We have also supported the United Nations Development Programme's regional innovation teams in Asia Pacific, Europe and Central Asia.

We will continue to explore the key role innovation labs and teams have to play in building the capability and culture of governments, companies, not-for-profits and others, to practically deal with the complex problems they face.



## 11.3

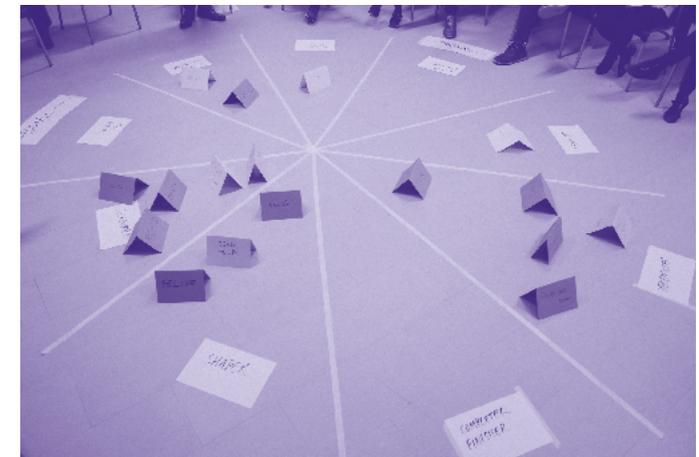
## Case studies

### i-teams

The impact of innovation teams from Spain, South Africa and Colombia make up some of the 20 case studies in the 2014 **i-teams** report by Nesta and Bloomberg Philanthropies. One example here is Chile's Laboratorio de Gobierno. Since 2015, Nesta has supported the Laboratorio de Gobierno, Chile's first national government innovation lab. This has included helping to set up the lab, providing staff inductions and initial training in innovation methods, ongoing advice and mentoring on their programme of work, and contributing to a benchmarking study of Chilean Public Sector innovation capacity. We also reviewed their innovation capacity building programme for civil servants, Experimenta, concluding that it is an example of a high-quality innovation learning programme that we can all learn from.

#### Right

The Nesta Innovation Skills team supporting Chile's Laboratorio de Gobierno to map out their team skills as part of their initial lab set-up.



## States of Change

At the end of 2017 we launched States of Change – a new global collective to bring together government innovators and support public innovation learning. Central to our mission is helping governments build their skills to deal practically with the complex problems they face, and as part of this we have developed a foundational learning programme on public innovation. This 9 to 12 month programme will run with teams of civil servants in two governments – the Victoria State Government in Australia and the Privy Council in Canada's federal government.

### Right

Public servants in Melbourne taking part in a States of Change learning programme, run in partnership with the Victorian State Government, Australia.



## Y Lab

Y Lab is the public service innovation lab for Wales. A partnership between Nesta and Cardiff University, it blends the best of Nesta's experience in supporting innovation with the academic rigour of the University to build capacity for innovation in public services; support new ideas, from creation to implementation; and research how and why innovation happens in public services.

To date, Y Lab's most significant project is Innovate to Save – a £6 million programme in partnership with Welsh Government that explores how different types of finance can be used to support innovation that generates cashable savings and improves public services.

### Right

Innovate to Save workshop. Image: Alex Sedgmond.



## Further resources



### Toolkit

#### **Innovation Teams and Labs: A practice guide**

[nesta.org.uk/toolkit/innovation-teams-and-labs-a-practice-guide](https://www.nesta.org.uk/toolkit/innovation-teams-and-labs-a-practice-guide)



### Report

#### **i-teams report (2014)**

[nesta.org.uk/report/i-teams-the-teams-and-funds-making-innovation-happen-in-governments-around-the-world](https://www.nesta.org.uk/report/i-teams-the-teams-and-funds-making-innovation-happen-in-governments-around-the-world)

#### **The Open Book of Social Innovation (2010)**

[nesta.org.uk/report/the-open-book-of-social-innovation](https://www.nesta.org.uk/report/the-open-book-of-social-innovation)



### Projects and partners

#### **Centre for Social Action Innovation Fund**

[nesta.org.uk/project/centre-social-action-innovation-fund](https://www.nesta.org.uk/project/centre-social-action-innovation-fund)

#### **Digital Makers**

[nesta.org.uk/project/digital-makers](https://www.nesta.org.uk/project/digital-makers)

#### **Lab Notes (monthly newsletter)**

[nesta.org.uk/project/lab-notes](https://www.nesta.org.uk/project/lab-notes)

#### **Nesta Health Lab**

[nesta.org.uk/project/health-lab](https://www.nesta.org.uk/project/health-lab)

#### **States of Change**

[nesta.org.uk/project/states-change](https://www.nesta.org.uk/project/states-change)

#### **Y Lab**

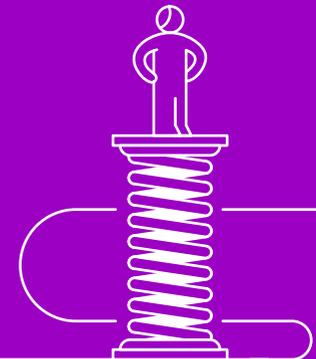
[ylab.wales](https://www.ylab.wales)



## Section 12

# Scaling grants for social innovations

Scaling is the process of supporting high impact social ventures to reach more people and fulfil their potential, achieving greater influence. Grant finance is used to help accelerate this process for non-profit ventures.



## 12.1

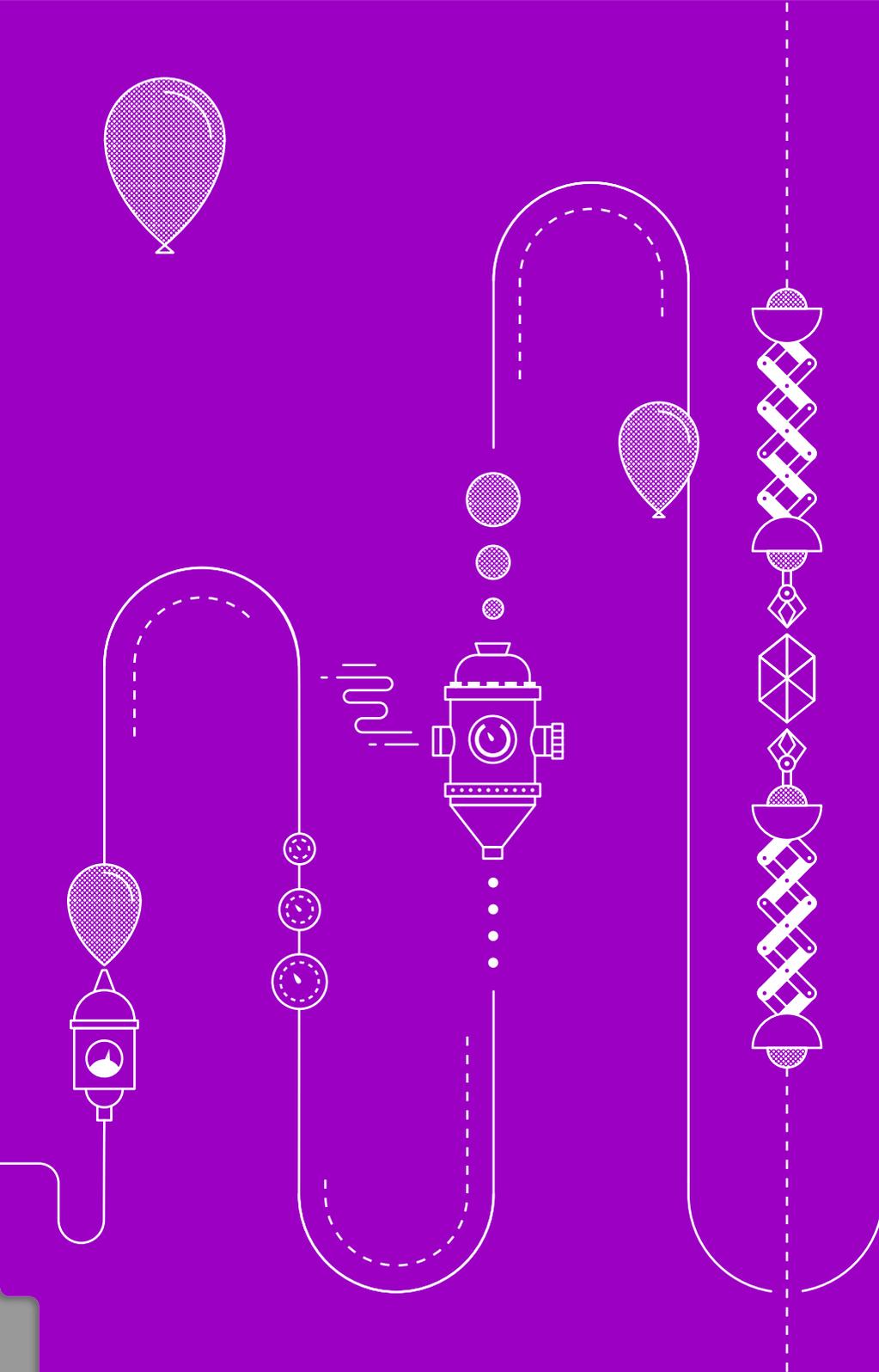
## How scaling social innovations works

**Most social innovations start small and stay small but to tackle problems entrenched in our societies, we need more social innovation at scale. Many social innovations have become part of our daily lives – think pre-school education, first aid, e-petitions. Yet scale is often elusive, and many social innovations fail to reach their potential.**

We see scaling as a distinct stage in the process of developing a social innovation. This is because the skills needed and activities involved are different from those required at other stages. In practice, some social innovators start scaling up their innovations early on. For example, they often aim to increase their reach rapidly while still developing their products and business models. Some grow their impact steadily over time, and others stay at a small scale for years before actively embarking on a strategy to expand reach.

Scale can be achieved in many ways. Many social ventures simply grow organically over time, slowly taking on new contracts in new regions, new staff, offices etc., each controlled by a central HQ, but others grow by:

- **Building a delivery network** – franchising, licensing, federations, and issuing kitemarks for quality are all used commercially but increasingly offer social ventures easy routes to scale without diluting quality.
- **Strategic partnerships** – mergers, acquisitions, using a larger organisation's network or back office expertise.
- **Influencing and advising** – moving into a role of advisor rather than deliverer in order to spread your message but not grow your organisation (for example, training people in a proven social innovation technique).



In practice, some social innovators start scaling up their innovations early on. For example, social tech innovators often aim to increase their reach rapidly, while still developing their products and business models. Others typically grow their impact steadily over time.

Yet scaling is not appropriate in every case. Scalable social innovations tend to be ones that:

- Are relevant beyond their initial context.
- Are relatively simple.
- Are clearly better than the alternatives.
- Don't rely solely on the talents of specific individuals.



## 12.2

# Supporting social ventures to grow through grant finance

**Many grants focus on the early stages of support for new innovations. Yet innovators can also benefit from dedicated financial support and tailored advice to pursue a scaling strategy and ensure their venture grows to benefit many more people.**

Grants are non-repayable funds, a gift of money usually linked to commitments on activities, outputs or outcomes. Grants are a simple and established form of funding widely used by charities, foundations, trusts, corporate giving and some government funding.

Scaling grants are designed to provide dedicated support to the most promising innovations, to help them replicate their model in new regions or reach more people and create a much bigger social impact. Grant finance might be used to hire new staff, incentivise new buyers, refine back office processes to deliver with a much higher volume of users etc. Grant finance would often be accompanied by work with entrepreneurs and innovators to identify the right routes to scale for them, and to support them to expand it in a way that's impactful and sustainable.



## 12.3 Nesta's work to support organisations to scale through grant finance

**Nesta has expertise not only in running grant programmes for scaling, but also in researching how social innovations can be effectively scaled. We encourage innovators to explore the different scaling routes and approaches that will help them grow or reach more people.**

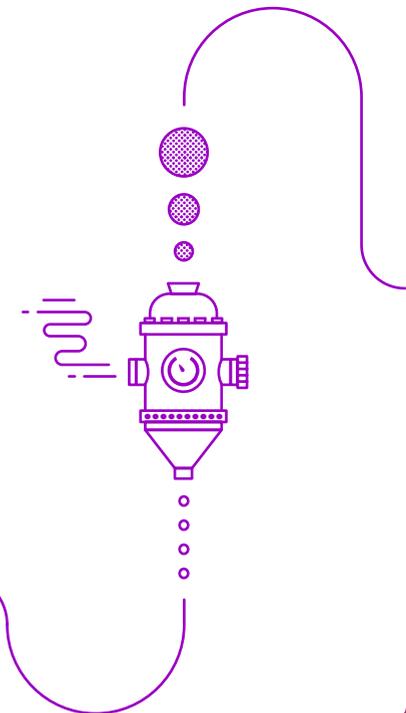
Our story started with a research publication in 2007, [In and Out of Sync](#), which looks at how private and third sector organisations innovate to respond to social needs. Using a range of case studies from around the world, it developed a general economic theory of scaling for this sector.

In 2014, our [Making It Big](#) report set out the different ways to scale social innovations, helping innovators consider the best strategies to suit their needs. The report uses examples from our first big scaling programme, the [Centre for Social Action Innovation Fund](#) (a £14 million fund to scale 50 promising innovations that used social action alongside public services to make a difference) to help illustrate the case. The fund matched significant grant finance (up to £750k) with expert advice to help organisations improve their evidence of impact and operationalise their model at a new scale.

At Nesta we have decided to resource significant non-financial support alongside our grants to allow for a 'high support, high challenge' model, where we walk each step of a grantee's journey to scale with them as their strongest advocate and fiercest critic. Our approach is more aligned to that used by early-stage impact investors than that adopted by more traditional grant funders.

In practice, that means we work intensively with our grantees throughout the lifetime of a fund – with regular check-in meetings where evidence and progress are discussed, ongoing mentoring and capacity building support that is often bespoke to an innovation's needs, and a shared sense of responsibility to make introductions and find new markets for the social venture. In 2016, we published a report [What Does it Take to go Big? Insights on Scaling Social Innovation](#), sharing lessons and practical insights in this area.

Nesta continues to use grant finance for scaling. We have also experimented with alternatives to grant finance, including conversion to equity or a loan if a social venture is successful. In November 2018 we published [Funding Innovation: A practice guide](#), setting out the pros and cons of different finance instruments.



## 12.4 Case studies

### Centre for Social Action Innovation Fund

A partnership between Nesta and the Cabinet Office (2013–2016), this £14 million fund aimed to scale promising innovations that used social action alongside public services to make a difference. Some examples from this fund include:



[goodgym.org](http://goodgym.org)

**GoodGym** – a community of runners who come together to provide social support visits to older people and manual labour for community projects. It was awarded £245,000 to support the scaling up of their activities across England to become operational in a minimum of 22 areas across England.



[codeclub.org/en](http://codeclub.org/en)

**Code Club** – a network of volunteer-led after school coding clubs, teaching young people how to build digital products like websites, animations and computer games. Code Club was awarded £859,000 to significantly scale up the volunteer-led part of the network. They now have a network of 6,750 clubs, reaching over 94,000 children, including a third of all English primary schools and many more around the world.

Right  
Code Club



### Accelerating Ideas



[nesta.org.uk/project/accelerating-ideas](http://nesta.org.uk/project/accelerating-ideas)

In 2016, we launched **Accelerating Ideas**, a partnership between Nesta and Big Lottery Fund, using National Lottery funding. Accelerating Ideas is supporting eight highly promising innovations to scale to create more ways for people to age well, be actively engaged and able to build stronger local networks and neighbourhoods. Three case studies from the fund are:



[thecaresfamily.org.uk](http://thecaresfamily.org.uk)

The **Cares Family** – a group of community networks of young professionals and older neighbours who support and socialise with one another. It has identified that there is a need to expand to other major urban populations in the UK who are experiencing a similar pace of change and conditions, which cause isolation and loneliness, and is using funding from Accelerating Ideas to achieve their goals.



[sharedlivesplus.org.uk](http://sharedlivesplus.org.uk)

**Shared Lives** – an innovative form of social care based around sharing home and family life. A Shared Lives carer shares their home and family life with an adult who needs care or support to help them live well. With funding from Accelerating Ideas, Shared Lives Plus is working on an ambitious programme to grow Shared Lives for older people in Scotland and Northern Ireland.



[goodsamapp.org](http://goodsamapp.org)

**GoodSAM** – a mobile app and web platform that alerts trained responders, such as off-duty doctors, nurses, paramedics and qualified first aiders, to life-threatening emergencies close by. Through Accelerating Ideas, GoodSAM aims to integrate with at least nine ambulance trusts across the UK and increase both the number of responders and the use of the app by the public. Currently GoodSAM is live in four ambulance services (London, Wales, North West and East Midlands) and integration is underway for four more ambulance services, with plans to go live by January 2019.

These examples contribute to a growing body of evidence on how different scaling strategies operate and what works for different types of organisations. We're using the **Nesta Standards of Evidence** to measure the impact of these innovations.

## Further resources



### Report

#### **In and Out of Sync (2007)**

[nesta.org.uk/report/in-and-out-of-sync](https://www.nesta.org.uk/report/in-and-out-of-sync)

#### **Knowledge and Learning for Social Projects Aiming to Grow or Scale (2018)**

[nesta.org.uk/report/knowledge-and-learning-for-social-projects-aiming-to-grow-or-scale](https://www.nesta.org.uk/report/knowledge-and-learning-for-social-projects-aiming-to-grow-or-scale)

#### **Making It Big: Strategies for Scaling Social Innovations (2014)**

[nesta.org.uk/report/making-it-big-strategies-for-scaling-social-innovations](https://www.nesta.org.uk/report/making-it-big-strategies-for-scaling-social-innovations)

#### **Mass Localism (2010)**

[nesta.org.uk/report/mass-localism](https://www.nesta.org.uk/report/mass-localism)

#### **Nesta Standards of Evidence (2013)**

[nesta.org.uk/report/nesta-standards-of-evidence](https://www.nesta.org.uk/report/nesta-standards-of-evidence)

#### **People Helping People: Lessons Learnt (2016)**

[nesta.org.uk/report/people-helping-people-lessons-learnt](https://www.nesta.org.uk/report/people-helping-people-lessons-learnt)

#### **What Does it Take to go Big? Insights on Scaling Social Innovation (2016)**

[nesta.org.uk/report/what-does-it-take-to-go-big-insights-on-scaling-social-innovation](https://www.nesta.org.uk/report/what-does-it-take-to-go-big-insights-on-scaling-social-innovation)



### Projects and partners

#### **Accelerating Ideas**

[nesta.org.uk/project/accelerating-ideas](https://www.nesta.org.uk/project/accelerating-ideas)

#### **Cares Family**

[nesta.org.uk/project/accelerating-ideas/growing-the-cares-family-north-london-cares-and-south-london-cares](https://www.nesta.org.uk/project/accelerating-ideas/growing-the-cares-family-north-london-cares-and-south-london-cares)

#### **Centre for Social Action Innovation Fund**

[nesta.org.uk/project/centre-social-action-innovation-fund](https://www.nesta.org.uk/project/centre-social-action-innovation-fund)

#### **Code Club**

[codeclub.org/en](https://codeclub.org/en)

#### **Connected Communities Innovation Fund**

[nesta.org.uk/project/connected-communities-innovation-fund](https://www.nesta.org.uk/project/connected-communities-innovation-fund)

#### **Early Years Social Action Fund**

[nesta.org.uk/project/early-years-social-action-fund](https://www.nesta.org.uk/project/early-years-social-action-fund)

#### **GoodGym**

[goodgym.org](https://goodgym.org)

#### **GoodSAM**

[goodsamapp.org](https://goodsamapp.org)

#### **Savers Support Fund**

[nesta.org.uk/project/savers-support-fund](https://www.nesta.org.uk/project/savers-support-fund)

#### **Second Half Fund**

[nesta.org.uk/project/second-half-fund-sharing-time-and-talents-life](https://www.nesta.org.uk/project/second-half-fund-sharing-time-and-talents-life)

#### **Shared Lives**

[sharedlivesplus.org.uk](https://sharedlivesplus.org.uk)

## Section 13

# Standards of Evidence

The Standards of Evidence model helps to answer an important innovation question: Is an innovation doing any good? Is it even doing harm? Is the status quo just as good as the innovation? It provides a robust framework for choosing the right approach to understand whether an innovation is working.



## 13.1

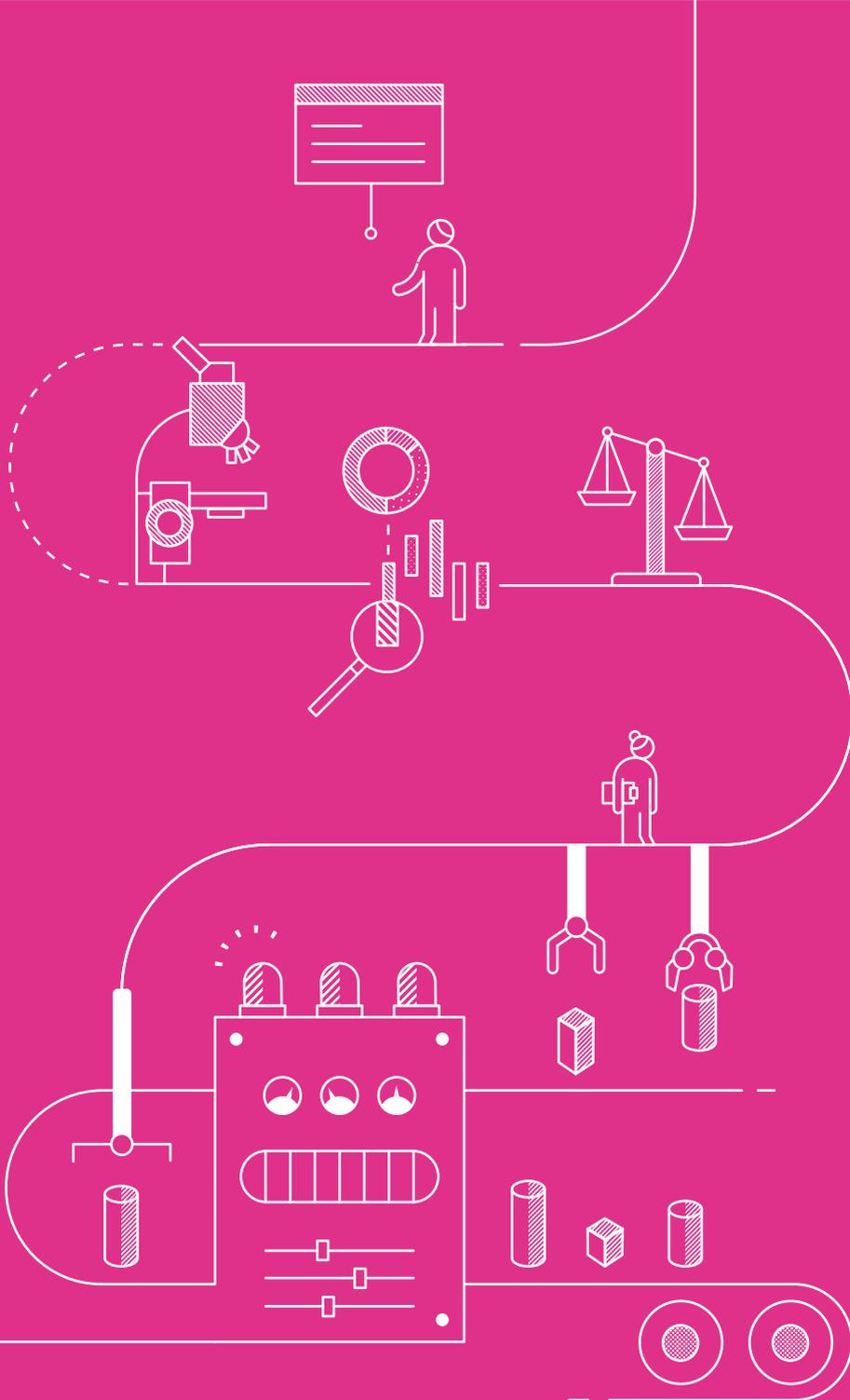
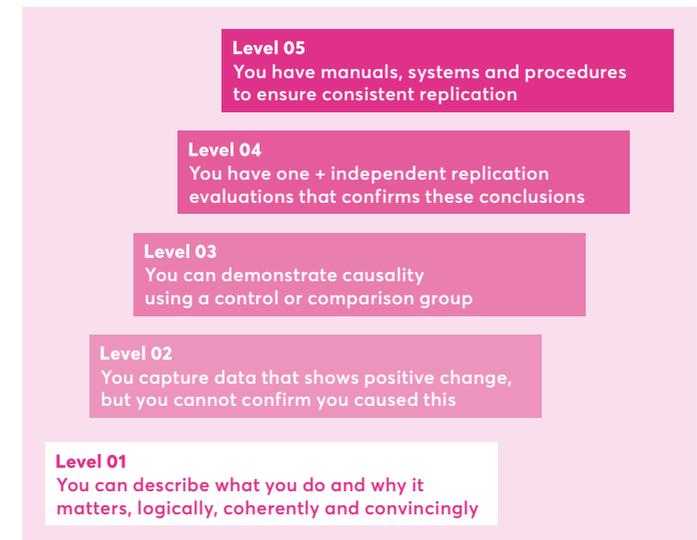
## How do the Standards of Evidence work?

**Standards provide a structure – often some sort of scale – for thinking about whether you are making a positive difference. Typically, the lower levels show that there is only limited evidence; higher levels show that more evidence is available. They can, however, vary widely around this model.**

The standards were first taken up in health. In medicine, we saw centuries of innovations that turned out to do harm, such as leeches, bloodletting, or smoking cigarettes to cure asthma. The rise of medical research – and the use of hierarchies of evidence – helped to bust these myths. Standards of Evidence take a similar evidence-based approach to social innovation. The standards have spread from medicine to other areas including education, crime, and housing.

The standards take you on an evidence journey:

**Fig. 16**  
From *Standards of evidence: an approach that balances the need for evidence with innovation*, Nesta (October 2013)

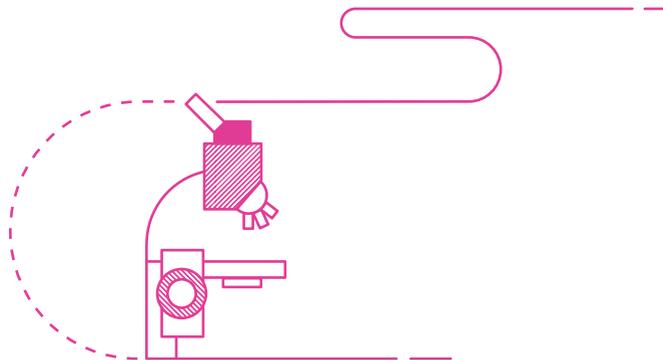


The first step of that journey asks you to describe what you plan to do, in a way that is coherent, clear and convincing. This is often referred to as a 'Theory of Change' and is useful for early-stage innovations. A Theory of Change helps you to be explicit about your goals – and how you'll achieve those goals.

Another benefit of doing a Theory of Change is that it's a first step in designing an effective evaluation: it asks you to accurately identify all of your desired outcomes, such as reductions in loneliness or increases in health and wellbeing – before going on to try and measure them.

The next stages of that evidence journey ask that you try and capture some data to see if you are making a significant difference. This may involve using control groups, comparing the people benefitting from your innovations with groups that do not, such as through randomised controlled trials.

The more advanced levels of the journey involve repeating the success of your innovation. If your smart idea worked well in Copenhagen or Cardiff, will it work in Paris or Prague? In the jargon, this is called replication, and is a vital part of your growth: showing that this is not a flash in the pan, and that your promising innovation can be repeated elsewhere.



## 13.2

# Nesta's work on Standards of Evidence

**In 2012, we developed our Standards of Evidence to evaluate the evidence created by our investments. Nesta was the first innovation body in the world to use a robust impact evidence framework to assist in funding decisions.**

It lays out five levels of evidence, ranging from a Theory of Change (Level 1) to larger bodies of evidence that have 'manuals, systems and procedures' to ensure replication (Level 5). We have helped organisations to move up these levels of evidence over time. It helps to increase our confidence that what we are doing is having a credible and measurable impact. The Standards help us to seek evidence that is proportionate to the right stage of innovation. So, for instance, early-stage innovation needs Levels 1 and 2. More advanced innovations, requiring more Nesta funding, should seek Levels 3, 4 and 5. Reaching towards higher levels of evidence, should only be used at the appropriate stage in the development of an innovation. It should only be used when a practice or programme has started to be well-researched and thought through, is being delivered consistently and effectively, and is backed up by early indications of positive impact.

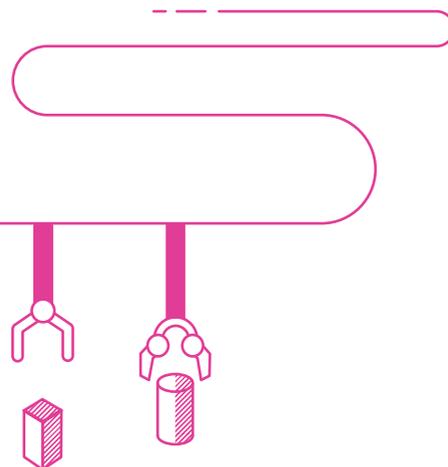
The Standards were first used on our impact investment funds. Since then, the Standards have been used in other parts of the organisation, such as the Centre for Social Action Innovation Fund, a partnership between Nesta and the Cabinet Office. All grantees receive support to create evaluation plans and find good evaluators, as well as finances to improve their evidence too.

We have helped organisations like Code Club undertake randomised control trials, Action Tutoring and Access Project have compared their results against a matched control group, and the British Lung Foundation are comparing against a comparison group from other regions. If the data is credible, then each of these organisations will be validated at Level 3 on our Standards of Evidence.



[alliance4usefulevidence.org](http://alliance4usefulevidence.org)

Standards of Evidence also continue to be championed by Nesta's **Alliance for Useful Evidence**. Founded in 2011, this network champions the smarter use of evidence in social policy and practice. In 2016, we developed the **Using Research Evidence: A Practice Guide** and the Evidence Masterclass programme to help people learn about the Standards, and about evidence-informed decision-making more widely. We have also been an advocate and host for some of the UK What Works Centres, many of which have their own evidence standards.



## 13.3

## Case studies

### The Access Project

The Access Project matches business volunteers with motivated students from disadvantaged backgrounds, helping them progress to top universities. The project was part of the Nesta and Cabinet Office Centre for Social Action.

The students involved in the programme were compared to other similar students who didn't receive the tutoring. They met Level 3 of the Standards of Evidence by using this type of evaluation, called 'propensity score matching'. The results were highly positive: six out of the nine evaluated schools showed statistically significant positive raised GCSE grades for the tutored pupils.

Tutored pupils were also shown to be more aspirational in their applications to universities, such as Russell Group universities like Oxford, Cambridge and Imperial College. Data collected before and after the students joined the Access Project found a rise in those attending top universities (Level 2 of the Standards of Evidence).

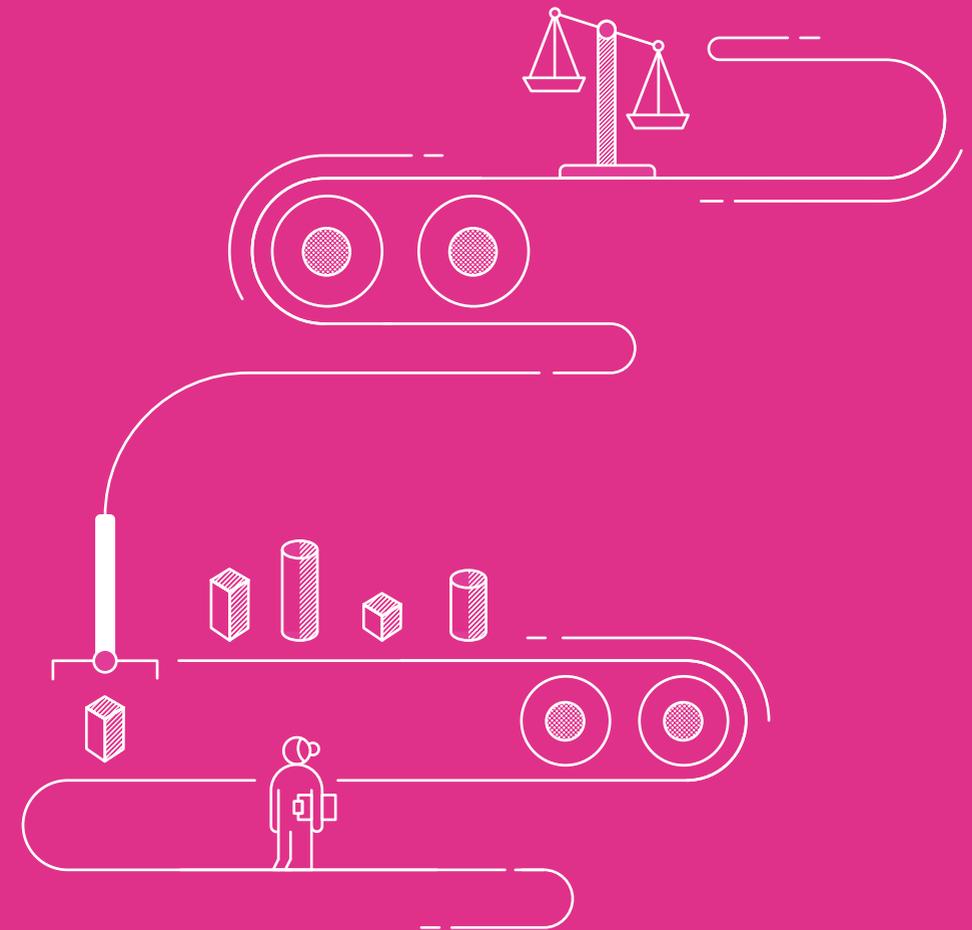
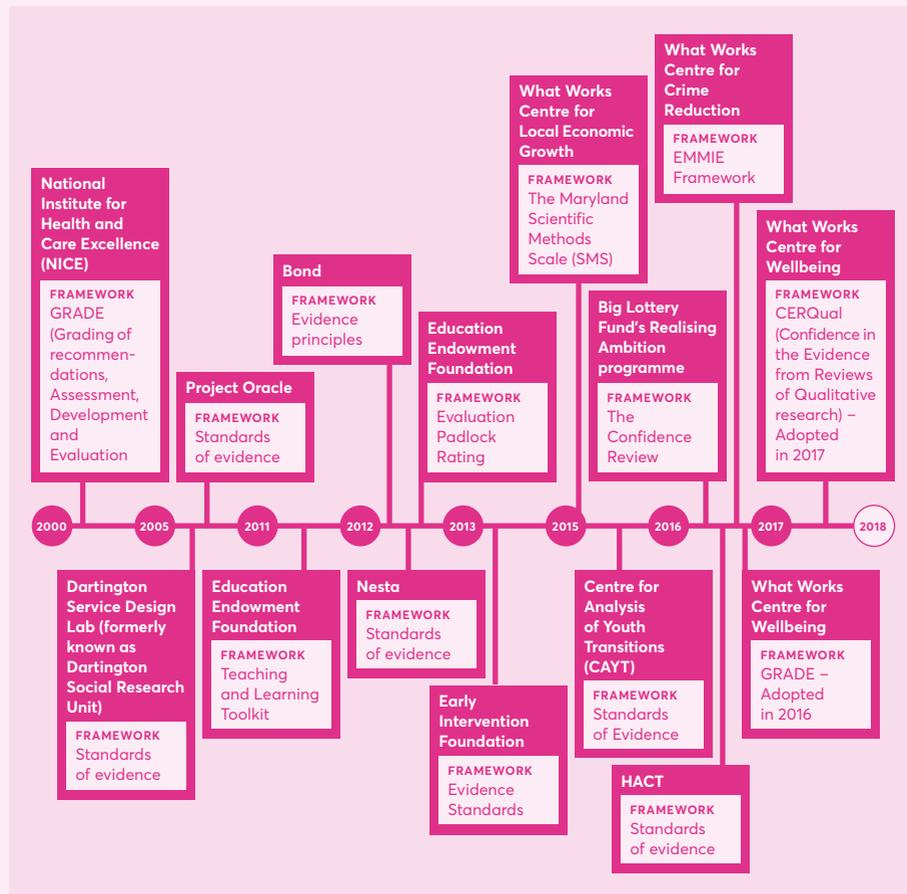
**Right**  
Jamie Gossage  
and Armando work  
together as part of  
The Access Project.  
Image: Robert Logan.



**Fig. 17**  
Standards of  
Evidence timeline

## Growth of the Standards

There has been a proliferation of evidence standards and frameworks in the UK and overseas. A recent Nesta report found 18 alone in the UK. Some organisations have adapted the Nesta version to their own needs. The housing innovation charity HACT, for instance, created their own version in 2016, funded by Public Health England and a group of leading housing associations. The Swedish innovation body Vinnova has translated the Standards for what they call their 'impact logic method'. They have also had value outside the not-for-profit sector; the global education business Pearson worked with Nesta to create a Standards of Evidence framework.



## Further resources



### Toolkit

#### Using Research Evidence – A Practice Guide (2016)

[nesta.org.uk/toolkit/using-research-evidence-practice-guide](https://www.nesta.org.uk/toolkit/using-research-evidence-practice-guide)



### Report

#### From Good Intentions to Real Impact: Rethinking the role of evidence in education businesses (2014)

[nesta.org.uk/report/from-good-intentions-to-real-impact-rethinking-the-role-of-evidence-in-education-businesses](https://www.nesta.org.uk/report/from-good-intentions-to-real-impact-rethinking-the-role-of-evidence-in-education-businesses)

#### Impact measurement in impact investing (2015)

[nesta.org.uk/report/impact-measurement-in-impact-investing](https://www.nesta.org.uk/report/impact-measurement-in-impact-investing)

#### Standards of Evidence: An approach that balances the need for evidence with innovation (2013)

[media.nesta.org.uk/documents/standards\\_of\\_evidence.pdf](https://media.nesta.org.uk/documents/standards_of_evidence.pdf)

#### What counts as good evidence?

(2013) Sandra Nutley et al

[alliance4usefulevidence.org/assets/What-Counts-as-Good-Evidence-WEB.pdf](https://alliance4usefulevidence.org/assets/What-Counts-as-Good-Evidence-WEB.pdf)



### Blog

#### What is the evidence for edtech? (2018)

[nesta.org.uk/blog/what-is-the-evidence-for-edtech](https://www.nesta.org.uk/blog/what-is-the-evidence-for-edtech)



### Projects and partners

#### Alliance for Useful Evidence

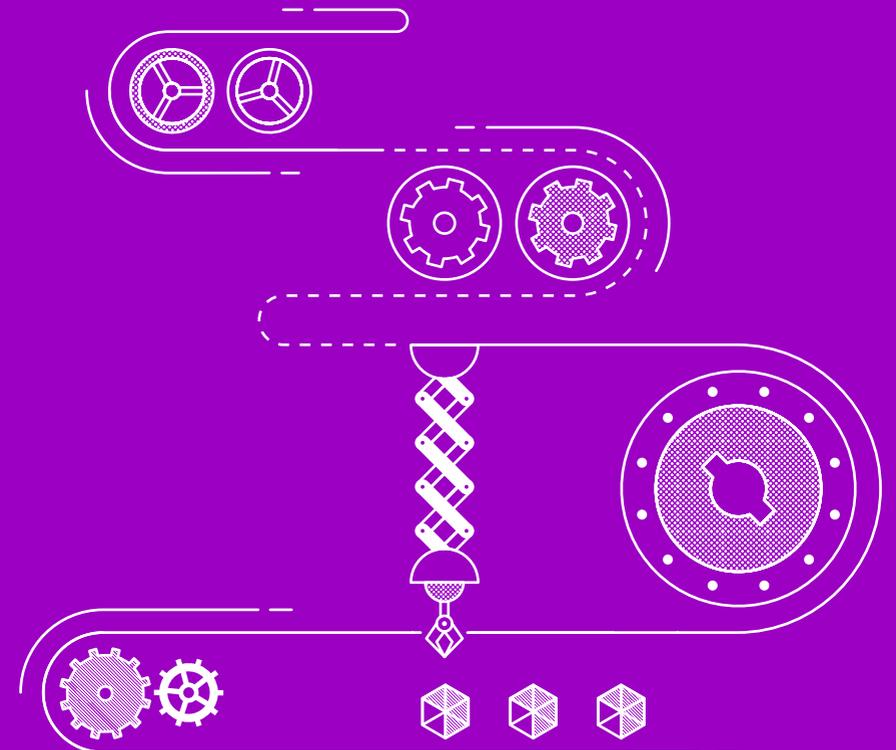
[alliance4usefulevidence.org](https://alliance4usefulevidence.org)



### Video

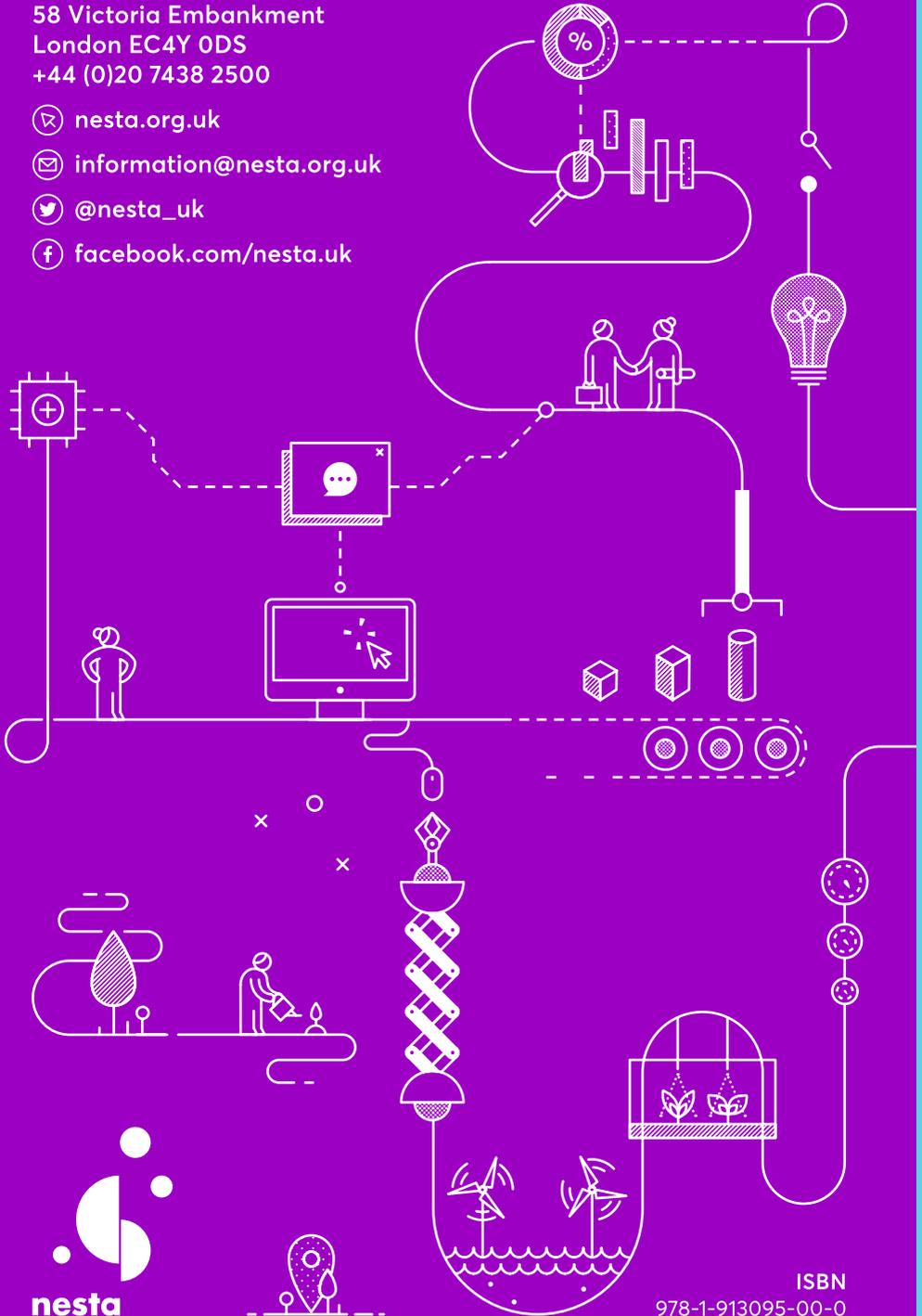
#### Guide to Nesta's use of standards of evidence, with TSIP(2015)(Video/Blog)

[nesta.org.uk/feature/centre-social-action-our-evidence-base/our-approach-to-evaluation](https://www.nesta.org.uk/feature/centre-social-action-our-evidence-base/our-approach-to-evaluation)



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