Funding innovation: A practice guide

Making money work harder

November 2018









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Challenge Prizes: A practice guide by Perrie Ballantyne and the Centre for Challenge Prizes

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Nesta's Practice Guides

This guide is part of a series of Practice Guides developed by Nesta's Innovation Skills team. The guides have been designed to help you to learn about innovation methods and approaches and put them into practice in your work.

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About Nesta

Nesta is a global innovation foundation. We back new ideas to tackle the big challenges of our time.

We use our knowledge, networks, funding and skills - working in partnership with others, including governments, businesses and charities. We are a UK charity but work all over the world, supported by a financial endowment.

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Introduction		4
Section A	Landscape of funding tools	5
Section B	 How we use different funding tools Grants Grants Stage-gate grants Match funding dependent grants Revenue dependent grants Convertible grants Convertible grants Combination grants Challenge prizes Matched crowdfunding Impact investment Loans Equity Social impact bonds Other funding tools 	12 12 17 19 20 21 22 23 27 31 33 36 39 40
Section C	Designing funds	41
Section D	Summary	46
Section E	Case studies	47



Introduction

Nesta is an innovation foundation, with a role to stimulate innovation for the common good. Over the years we have experimented with many different ways of using money to achieve results - such as crowdfunding, equity, loans and social impact bonds (collectively called impact investment), challenge prizes, grants and intermediary funding, as we've backed thousands of innovators in public services, charities and social business.

In this guide, we summarise some of what we've learned about how to use money effectively. We set out the many options available to funders – who often tend to use just one or two methods and so miss out on others that might be more appropriate.

How to use this guide

This guide is primarily aimed at funders – governments, agencies, investment organisations and foundations who provide funding for projects or organisations to support innovation.

We hope this guide gives them an insight into different financial tools that can be used to support innovations – what they are, how they can be used and what some of the challenges are around using them.



As part of Nesta's <u>Accelerating Ideas Fund</u>, the British Lung Foundation received a grant to expand their peer support programme (see page 13)



Landscape of funding tools

Many organisations fund innovation. In some fields, such as science, academic research or technology, the financial tools used to support innovation are well-understood and mature. In this guide, our focus is on organisations funding innovation for public benefit in fields like education and health, housing and jobs where the systems for supporting innovation tend to be a lot less developed. These organisations may use funding to:

- Achieve a result, output or outcome that is clearly defined in advance, such as better school results or less homelessness.
- Create capacities for achieving outcomes in the future, including better capacities to innovate.
- Test or explore ideas, where the key goal is new knowledge.

There are then many ways of using money to achieve these goals. In Table 1 on the following page, we show some of the financial tools that can be used. These include grants, loans and equity, challenge prizes and social impact bonds, matched crowdfunding to procurement, and often they can be used in combination.



The Central School of Ballet received loan finance from the <u>Arts Impact Fund</u> (see <u>page 55</u>) to help open its new premises on London's South Bank, increasing its capacity and ability to work with local communities.

Table 1: Landscape of funding tools

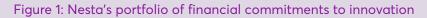
Funding tool	Description	Advantages	Challenges
Grants	Gift of money, usually linked to commitments on activities, outputs or outcomes.	Simple, established.	How intensively to manage, can drive dependency. No return to funder.
Grants for R&D funding	Stage-gate funding with payments released as product developed/evidence demonstrated.	Suitable for high risk/reward projects.	Requires greater management. Staging can limit project flexibility.
Grants/equity in accelerators in stage-gate	Grants plus small equity shares for new companies, often linked to non-financial help.	Higher success rate for startups.	Intensive input needed to achieve success.
Grants convertible to loans, or grants with royalties	Grants with conditions that make them turn into loans once milestones are met, e.g. on revenues.	Recycles money, drives good behaviours re: financial sustainability.	Requires longer-term engagement to check on revenues and repayment schedule. Modelling of repayment will often be overly optimistic. Can be gamed if repayment triggers are not set right. Tax/accounting treatment not well established.
Grants convertible to equity	Similarly, grants which turn into rights to equity once revenue or other milestones are met.	Recycles money, share of high value projects.	Managing investment, follow-on funding, getting the conversion triggers right. Only feasible if recipients established with shares. Tax/accounting treatment and legal enforceability not well established.
Match crowdfunding	Committing money on condition that matched funding is raised through crowdfunding platforms.	Encourages mobilisation of public money and commitment. Engages wider audience of backers.	Skews to high income audiences; sums still quite small.
Loans	Money lent to be repaid with interest over agreed timescale.	Recycles money. Straightforward offer to recipients. Easy to value cost and likely return.	Managing loan book, risk assessment and security.
Project-specific Ioans	Loans linked to specific projects, e.g. in technology, repaid only if the projects succeed.	Recycles money. Straightforward offer, attractive to recipient as no repayment if project fails.	Less secure than loans secured against the firm as a whole (see above). Need to monitor project success to see if loan needs to be repaid (this can be gamed).
Convertible Ioans	Loans offering rights to convert into equity.	Gives lender chance to participate in upside in case of radical success, while still promising repayment in base case.	Can put off future equity investors as carried on recipient's balance sheet. Funder needs to manage conversion process.
Quasi-equity	Loans offering revenue participation rights (e.g. shares of revenue or profit over given levels).	Encourages business growth, recycles more money from successes.	General challenges of oversight and monitoring.

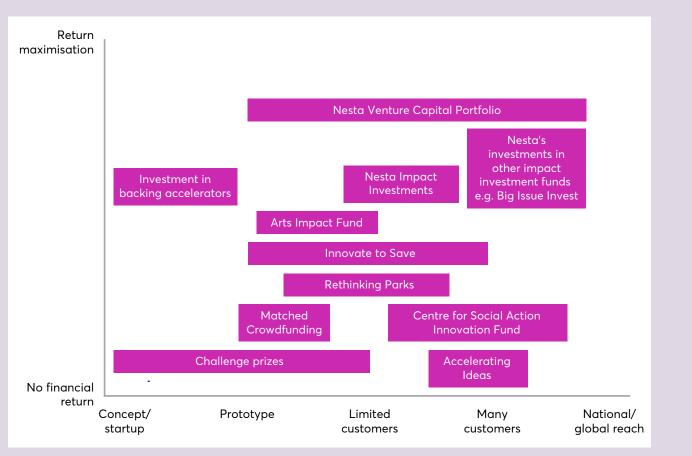
Impact Bonds (social, development, etc.)	Funding raised from philanthropy or capital markets with commitment of payments linked to outcomes.	Shifts risk from government; encourages focus on evidence and outcomes; can bring in new skills.	Relatively few fields with suitable conditions; still young model in experimental phase.
Venture equity investment (and impact venture investment)	Investment in equity in early-stage companies, usually with aim of significant growth in value and linked to active involvement in management, strategy, etc. Impact investment also aims for social impact.	Funder can participate in upside. Funder gains (some) control in firm. Allows rigorous linking of investment and outcomes (e.g. using standards of evidence).	Intensive management needed for realising value and securing follow- on funding. If funder is charity, link to objects and public benefit must be monitored. Difficult to exit. Average venture capital returns very low.
Intermediary funding	Funding directed through intermediaries (e.g. on Big Society Capital model) which then invest loans, equity, etc., in firms or social enterprises. Usually investors represented on investment committee.	Can increase funding flows (e.g. with co-mingled funds); creates more specialist capacity and some healthy competition. When working well, interest from loans covers management costs.	Sometimes challenges raising matched funds; achieving sufficient scale; and handling timescales of investments and returns.
Challenge prizes	Commitments of funding tied to proof of ability to solve a novel problem.	Good for where market incumbents have little incentive to innovate. Raises awareness and attracts new entrants. Favours technological/product- based innovation.	Challenge of setting the right goal: requires expertise and is difficult to change once set. Success needs to be well-defined. Requires firms to spend money ahead of government funding.
Revenue-based funding models	Releasing grants or loans in response to reaching revenue targets.	Aims to encourage trading and entrepreneurship, as opposed to grant dependence. Used in development, technology, self-employment and other fields.	Revenue results achieved can have many causes, therefore may provide capital where it's not needed; conversely can push recipients to maximise short-term revenue rather than long-term business building.
Golden share	Equity finance linked to a special share which cannot be diluted, or offers special voting rights.	Opportunity to participate in upside without follow-on investment. Gives funder control over firm.	Represents a significant concession for organisation receiving funding. May deter future equity investors.
Services contract to support innovations	Procurement of services from small firms, charities or social enterprises as a way of helping them grow or innovate (e.g. SBIR).	Uses procurement process to support small innovative entities.	Reliance on relatively untried service provider.

Most funders just use one or two tools and never seriously consider using other ones which could make their money go further. These tools range across a continuum from pure grants designed to achieve public benefit, to very commercial investments primarily designed to achieve a private return. Our hope is that this guide goes further in helping to encourage more creative thinking about how to use funds to achieve objectives, as well as greater awareness of how to fit the right funding tool to the right goals.

Taking a portfolio approach

Rather than focusing on only one or two approaches, using a mix of funding mechanisms allows funders to explore different rates of returns on their investments and support innovations at different stages in their journey. Figure 1 below uses examples to illustrate the portfolio of Nesta's activities to support innovation.







Oomph! provides exercise training and runs excursions services for care homes, and is one of the social businesses supported by Nesta Impact Investments (see page 58)

Designing innovation funds in government

There are now thousands of innovation funds in operation in governments around the world. Some focus on a particular kind of organisation (e.g. schools); some aim to improve innovation in systems (such as the health service); some aim to promote an idea (e.g. promoting volunteering or use of technology). Some are internal, backing ideas within the public sector, while others face outwards.

Nesta has a lot of experience running, advising, researching and designing funds. These funds can be designed in many different ways depending on:

- The goal. The primary goal of the fund may be to generate new ideas; to take them to scale; to achieve cashable savings; or just to shift cultures. These lead to many options for design.
- Ways of using money. As this guide shows there are many ways to use money – including grants, loans, equity and combinations. But most governments automatically use the one they're most used to.
- How the stages through which ideas develop are managed. Some funds have stage-gates, starting out by funding many ideas at small scale and then backing fewer at larger scale. But often the temptation is to get money out quickly.
- How evidence and impact are organised. We all want to know that spending is achieving results. But early-stage innovations need freedom to take risks and explore: too many onerous or rigid measurement requirements can kill creativity (though it's important to gather data and learn). By contrast, later-stage innovations benefit from much more rigorous assessment. In between, experiments using control groups can help to clarify what impact is being achieved.
- How internal, how external? Funds tend to specify likely recipients. They can be mainly for existing public servants, or aimed at startups and other external organisations. This will generally reflect the goal – if the goal is to achieve an outcome, then there should be as few restrictions on who can benefit as possible; if the goal is to shift cultures, it may make more sense to restrict funding to projects within the public sector.

Mistakes

In our experience, two common mistakes are made in the design of many, if not most, innovation funds, particularly ones run by governments.

The first is insufficient focus upstream. Too little attention is paid to preparing the ground, sharing ideas and evidence and helping the people who are developing ideas at an early stage to develop better ones. This failure to curate, encourage and educate generally means that applications are lower quality, less inspired and less aware of what others have tried. Nearly always, more upstream work pays off, even though this might be seen as an unnecessary cost.

The second error is insufficient attention downstream – failing to ensure a line of sight from an idea to scale. That may mean a route to taking an idea into policy or programmes if it turns out to work, or it may mean a route to getting an innovator a contract and mobilising public procurement. Without a clear line of sight to scale, funds risk supporting a range of interesting pilots with nowhere to go.

These two errors often come together. Ministers often quite like innovation funds. But too many funds are put together quickly, with little attention to what has been learned previously, too much focus on getting money out of the door quickly to as many recipients as possible, too low a quality threshold (so that most aren't very innovative) and without a route to impact. These errors are repeated, again and again. As a result, a lot of public money which could be playing a critical role in helping public systems to evolve and adapt, instead goes to waste.

Improving both supply and demand

The primary focus of this guide is on funding innovation, rather than just funding good works, or just achieving a good financial return. The ultimate aim for most innovations is to scale their impact, in order achieve maximum benefit, for as many people as possible. To do so, innovations need to have an alignment of supply and demand, and this is a key challenge for funders and one that is frequently overlooked.

It's usually clear how you might use funding to improve the quality of supply: funding an early idea to refine it, gather more evidence about impact or improve it technically. But unless there is demand for the idea, even the most perfect innovations will fail to spread.

With social and public innovation, that demand is often indirect, since the purchasers are often not the same people as the direct beneficiaries. That's true of most education and healthcare, as well as social services. So providers of innovations have to persuade the key decision-makers to shift resources from what they're currently purchasing to something new. That may involve advocacy – e.g. persuading governments that a problem matters – as well as showing hard evidence that an intervention works.

Additionally, research may also be required to understand what the real demand actually is. Often, the issue that needs to be addressed may be invisible or unexpressed in the current way of doing things. Approaches such as ethnography and service design can help to unpick this and identify the right issue to tackle through funding.

Where effective supply and demand are combined, innovations can simultaneously achieve social impact and prove to be financially sustainable. The key point is that funding sometimes needs to be directed to creating the environment for the innovation to thrive as well as to the innovation itself. Figure 2 below demonstrates the space in which innovations evolve and grow.

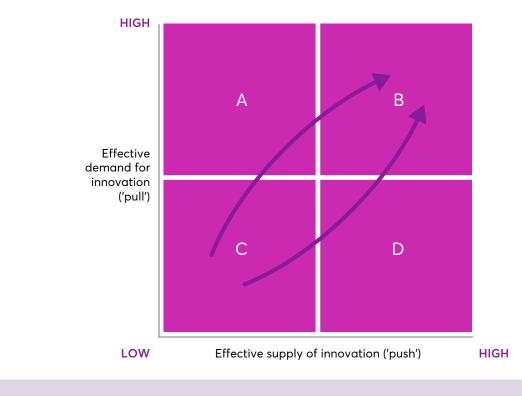


Figure 2: The growth map

Supply does not automatically elicit demand, or vice versa, but supply and demand do influence each other – for example, when a successful demonstration project persuades the public to look in a new way at the need for action to address a social problem, or when public concern persuades existing innovators to redirect their energies. For innovations to achieve maximum social impact, they need to be in the top right-hand quadrant (B) where viable innovations find customers who are willing to pay.



Prototypes for rapid diagnostics in preventing the unnecessary use of antibiotics, developed as part of the Longitude Prize run by Nesta's Challenge Prize Centre (see page 53)



How we use different funding tools

1 Grants

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. However, funders are often limited in their use of grants, opting for the simplest form – a gift of money with no return to the funder. A criticism of grant funding is that it risks driving dependency rather than supporting sustainable initiatives.

What is less well known are the many variations and adaptations of grants that organisations could be using, as well as the different types of organisations that could be funded to help reach a desired public benefit goal – including social businesses.

Nesta's experience with grant making

Nesta has extensive experience of using grant funding to support social innovation. Since 2012, we have awarded £54 million in grants. The majority of our grants are awarded through 'innovation grant funds', which are designed around a theme or area of activity which has long term potential (see page 14-15).

The fact that Nesta is grant funding innovation, rather than immediate delivery of outcomes, leads us to a very different approach to funding that we have been developing and refining over many years. We operate as a **'high support, high challenge'** funder to help maximise innovations' scale and impact. 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, and ongoing mentoring and capacity building support that is often bespoke to an innovation's needs.

More often than not, our relationship with grantees starts before grants are agreed and signed. Like most funders we proactively promote funds via live events, webinars, syndication through regional partners and their networks, blogging and wider comms activity. But we go further, encouraging innovations to speak with us before they submit their ideas, supporting shortlisted innovations develop the quality of their proposals and offering support in working out how to operate as a partnership. If successful, our grant agreements are then co-designed with the grantees - an important part of the process of agreeing what will be achieved and how. Our approach to grant funding innovation focuses as much on capacity building as it does on financial support. We work intensively with our grantees throughout the lifetime of a fund, therefore funding needs to be:

- Tolerant of risk and failure, with support in place to anticipate and mitigate against failure where possible and an appetite to reflect and learn from failure and use it as a spur to creating better solutions in the future.
- Flexible to changing circumstances and evolving understanding with regular checkins to discuss and assess progress and an emphasis on building a relationship of trust where problems and challenges can be shared and resolved.
- Focus on long-term financial sustainability and scaling as much as on immediate beneficiary impact, which leads us to think as much about the development of the organisational leadership and delivery capacity as the project delivery. Essentially, we want innovations to be as financially sustainable as possible (from whatever funding source is most appropriate e.g. commissioner contract, user payment, etc.) so that they avoid a 'cliff edge' at the end of a grant.

Over the years, we have experimented and refined how we design and run innovation grant funds, choosing different approaches dependent on what we want to achieve and a sector's need today and in the near future. It's worth noting that we generally work in partnership to deliver our grant funds, which enables us to get buy-in from key sectors or influencers, share learning more widely, increase funding for innovations and amplify our impact. Outlined below, is a variety of grant funds we have designed over recent years:



Prototyping and testing new ideas (early

pioneers) – for example Innovation in Giving, a partnership with the UK Cabinet Office, which sought the best and most radical new ideas for increasing the level of giving (time and money) and sharing. Fifty-six innovations were awarded up to £50,000 each and capacity building support to prototype their ideas, with a subsequent stage-gate to award additional funding if successful. We use prototyping funds to support innovators to take a more structured approach to testing and improving an idea at an early stage, before committing more resources to it.



Scaling promising innovations - such as Accelerating Ideas, a partnership with Big Lottery Fund, which is supporting eight promising ageing innovations to increase their reach and impact to many more people across the UK. The fund awarded £5.48 million in grants over five years - as we know to scale successfully takes time and patience. Scaling funds are designed to support social innovations to reach more people, achieving greater impact. For example, through the £14 million Centre for Social Action: Innovation Fund we supported a range 42 innovations to scale. From relatively early-stage innovations that have worked in a small number of localities and have some evidence of impact (e.g. <u>Code Club</u> to grow from 1,108 to 5,000 clubs) through to more developed solutions with a stronger evidence base and operating at some scale (e.g. Shared Live Plus).

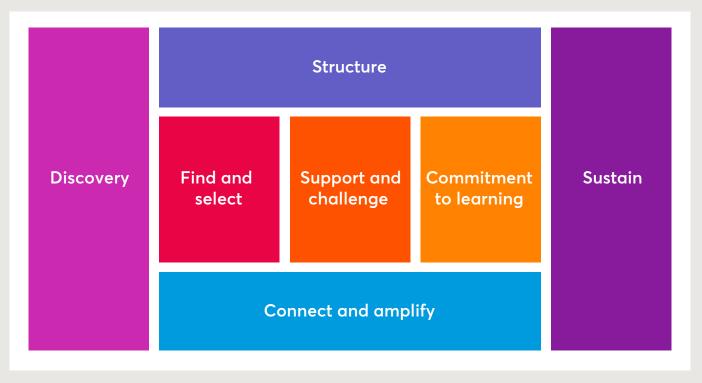


Stimulating a sector to innovate – including Creative Councils, a partnership with Local Government Association, which sought to stimulate innovation in local government by getting them to think about opportunities and challenges, generate ideas and make the case for change. We selected 17 councils with the most promising ideas and worked with them over a period of nine months with small grant funding and capacity building support. Five councils then received an additional £150,000 grant funding and bespoke capacity building support to further develop their innovations.

Replicating successful models – for example Cities of Service, a partnership with Bloomberg Philanthropies and the UK Cabinet Office, which offered groups in UK cities to replicate a US model of mobilising large numbers of volunteers to address key local challenges in seven UK cities.

Setting up and running a grant fund

Nesta's approach to setting up and running a grant fund can be seen as being made from the following building blocks:



Discovery

When grant funding innovation, the first task is often to find a theme or area of activity which has long-term potential. Within a theme, we aim to focus on what innovators need today and in the near future. The stage which innovations are at is critical – early pioneers, scaling, and integration with mainstream practice all require different approaches.

Similarly the model of change matters. Complex in-

system change, digital startup innovation, translational research, incremental improvement, and campaigns to shift attitudes and norms are all valid forms of innovation.

To design an innovation grant fund you will need to undertake a discovery phase to understand the sector in which the fund will operate - its stakeholders, stage of development, institutional forms, evidentiary standards, networks, development needs and paths to scale, etc.

Structure

Depending on the focus previously identified, the fund can require different:

- Eligibility criteria certain types of organisation or partnerships are likely to be targeted.
- **Grant size** a small startup can use £25-50k effectively. Within a large organisation however, smaller projects can lose visibility and traction.
- **Beneficiary outcomes** these can vary widely. We put a premium on measurable outcomes that can evidence and support the growth of the field.
- Timescales digital innovation can be prototyped relatively quickly; change in large public sector organisations can take much longer to become sustainable.
- Support needs vary for different grants and might include support on evidence, governance, connections, marketing advice, etc. Without this support, cash is used less effectively than it would be otherwise.

Find and select

The single most important factor in the success of a grant fund is probably the quality of the applicants – securing these is not straightforward, especially when we seek to reach beyond the 'usual suspects'. We are proactive in seeking out the best applications and run live events, webinars and, for shortlisted candidates,

time with a dedicated Nesta staff member. Once we have received applications we often use experts to help us assess, look at whole portfolio of risk, understand the supply and demand side of innovation and carry out careful due diligence.

Support and challenge

We practice a more intensive form of grant management than most funders – we refer to this as 'high support, high challenge', more aligned to an early-stage impact investor. We stretch and challenge our innovations but also give them valuable, often bespoke, advice and capacity building support through the lifetime of a fund. This could include support with marketing and communications, business planning, financing and fundraising, governance and evidence creation.

Commitment to learning

Evidence and learning is integrated throughout our innovation grant funds. We expect innovations to have a Theory of Change which explains what they do (or want to do) will logically have an impact on the ultimate outcome. On scaling funds we will invest in independent evaluations to demonstrate correlation or causality (see Nesta's Standards of Evidence <u>page</u> <u>44</u>) and all innovations need to commit to learning from their work and sharing this with others.

Connect and amplify

The impact of our funding is massively reduced if few people hear about its successes, so we support grantees to build their profile to become sustainable and grow. We connect them to senior decisionmakers and invest in high quality evaluations. We also understand, that much of the impact of funding

innovation come from replication and adoption by others. Therefore, we invest in translating the impact and learning of funds into striking and accessible outputs - events, practice guides, evaluations, compelling narratives and stories.

Sustain

This refers to the period after the grant has ended. If the innovation ends with the fund, then the grant relationship did not succeed, no matter how successful it was during the period of funding. While a degree of failure goes with the territory, and shows that we are taking sufficient risk, sustainability and scale are key long-term goals. We want to avoid a 'cliff edge' for projects when the grant ends.

How we use grant funding

We award grant funding to a range of organisations, including charities, local governments, social businesses, universities and social enterprises. This is because we believe new ideas for social good can come from a variety of sources, including social business. However, if grant funding is awarded to a social business, careful consideration is needed to ensure that any benefit is for public good and that, where benefit does accrue to an individual or business (known as 'private benefit'), this is only incidental in nature (see Case study: uMotif, page 50).

Over the years, we have also experimented with adapting how we award individual grants – such as combining grants with loans or equity, converting grants to loans or grants dependent on matched funding. We most frequently use stage-gating funding as a way for managing risk in our funds, whereas combining grants with equity is used rarely and only in specific circumstance.



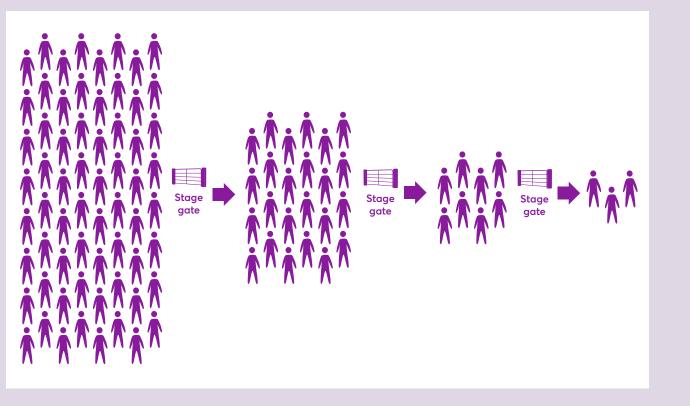
The Cares Family, a group of community networks reducing loneliness through mutual relationships, received grant funding through the Accelerating Ideas Fund to scale and grow its model (see page 13)

a. Stage-gate grants

Stage-gate grants are where a smaller grant is awarded initially and a 'stage-gate' is imposed, whereby successful innovations can then access larger amounts of funding once they have passed the stage-gate. This approach is often used to help fund the development of new ideas (frequently digital technologies, R&D funding), as it helps to manage risk. Nesta has predominantly used them in two ways:

- i. On prototyping funds/early pioneers funds, where we give a selection of promising innovations additional funds and capacity building support to help grow their activities after an initial prototyping phase. Innovation in Giving awarded 37 innovations up to £50,000 to prototype their ideas, with 11 then receiving upto £200,000 after the stage-gate. Creative Councils awarded 17 councils initially, with five then receiving up to £150,000 after the stage-gate.
- ii. We provide small development grants in advance of innovations applying for significant funding, such as in <u>Innovate to Save</u> or <u>Accelerating Ideas</u>. At the first stage, both financial and capacity building support are provided to enable an organisation to develop and design more robust proposals in collaboration with Nesta. Accelerating Ideas fund awarded 11 innovations a development grant of up to £15,000 to support the time investment needed to develop a robust proposal and credible scaling plan which took about six months to create.

Figure 3: Using stage-gates and filters



Accelerating Ideas: stage-gate process

Accelerating Ideas fund is a £5.48 million fund to support eight highly promising ageing innovations to increase their reach and impact to many more people across the UK.

A longlist of 11 innovations (all of which we had worked with for over two years through the Centre for Social Action Innovation Fund) were selected by Nesta and Big Lottery Fund based on:

- Addressing the opportunities and challenges of an ageing population.
- Innovations supported three key principles: having UK relevance; a promising evidence base; and putting people in the lead.

 Demonstrated potential to deliver greater impact through, for example, previous and current work with Nesta.

The 11 longlisted innovations were then asked to codevelop their ideas with Nesta (and our specialist support providers, PWC and Uscreates). A £15,000 development grant was available to support the time investment needed to develop their scaling plans, which took around six months to create.

Subsequently, Nesta convened an Advisory Group to help the team to reach a decision on which of these innovations should receive significant funding and support over five years to implement their plans. Eight innovations were then awarded between £420,000 - £960,000.

Why use stage-gate grants:

- The stage-gate approach is suitable for higher-risk projects, as smaller amounts can be committed in the early stages when outcomes are uncertain rather than risking large funds on untested ideas.
- It can help funders decide who to back, and if providing development grants in advance of applying for large funds, will enable smaller organisations to develop proposals (often collaboratively with the funder) without having to invest their own limited funds into staff time, de-risking their involvement.

What to be aware of when using stage-gate grants:

- This approach requires greater management of grantees and clear assessment processes in order to determine who should be awarded more funds.
- Do not underestimate the time or expertise needed by staff to work with innovations.

b. Match funding dependent grants

These are grants that can only be triggered when match funding is secured. This can either be at the start of the grant, or at a set milestone. This approach helps both recipients and funders leverage additional funding, and when done well creates better connections between funders.

In 2017, Nesta awarded a grant of £20,000 to support the development of <u>Teacher Tapp</u> – an experimental app-based method of collecting impact data from teachers. A condition of the funding and a trigger for the first milestone was evidence of match funding – in this case from <u>Gatsby Foundation</u> who also awarded £20,000. The combined grants enabled the app to be prototyped and piloted by hundreds of teachers.

Why use match funding dependent grants:

- Can incentivise recipients to be proactive in securing additional funds, and de-risks the investment for the funder if they are only required to put in a percentage.
- Match funding at a set milestone is suitable for innovations wanting to scale, and can incentivise other funders when they know their funding will be matched. We often specify a single funder and amount for the milestone.
- When match funding is required to trigger the initial grant, we often find that a smaller number of funders (two or three) will match fund at an equal value, e.g. £20,000 each.

What to be aware of when using match funding dependent grants:

- If match funding with another organisation, be mindful of having similar reporting milestones so you do not duplicate work for the grant recipient.
- Be time bound on match funding opportunities in order to incentivise speed and decision-making across all parties.
- Be careful not to create a 'who signs first' conundrum if multiple organisations are match funding.
- Speak with the other funder(s), rather than having the grant recipient co-ordinate conversations to understand why each organisation is awarding funding, any risks involved, reporting milestones etc.

c. Revenue dependent grants

With this approach, grants payments are released when particular revenue targets have been reached e.g. a revenue target is set as a milestone requirement. It is most suitable for innovations that are scaling and sell a product or service. Nesta uses this on an ad-hoc basis.

It can be tricky to set revenue targets that stretch an organisation but are also realistic. When using this type of grant we will give additional support, proactively make introductions to new customers and help identify new market opportunities where appropriate.

Why use revenue dependent grants:

- Revenue dependent grants aim to incentivise and encourage trading, as opposed to grant dependency, and can be a useful tool when supporting innovations to grow and become more financially sustainable.
- By making funding available on revenue (e.g. number of buyers or commissioners) you can help incentivise others to invest in the innovation de-risking the purchase of the service in its early stages.
- Helps protect your financial investment, so that money is only released as needed and when demand for the innovation is shown.

What to be aware of when using revenue dependent grants:

- When setting revenue targets, these need to be realistic as organisations are frequently overly optimistic about their growth and potential revenue.
- You need to plan how you will manage the process. What will your approach be if they only just miss their target? How will you monitor their progress in advance of meeting their target? What support can you give or introductions can you make?
- Can be seen to reward short-term revenue rather than long-term business sustainability and growth.



City Year UK were one of Nesta's <u>Centre for Social Action Innovation Fund</u> grantees. They support volunteers to help pupils from disadvantaged backgrounds enjoy and succeed at school.

d. Convertible grants

Convertible grants are a way of managing the risk of grant making to organisations which may go on to make considerable commercial profit in the future. They are usually used with tech companies, especially social enterprises or private companies. We create options in the initial grant agreement that if successful, we reserve the right to convert our grant to a loan, equity or repayment.

- i. Repayable grants (convertible to loans): These grants convert to a loan once milestones are met, for example revenue targets. They are particularly useful when funding social businesses and can be used when prototyping new ideas, services or products, where it's not known at the start if they will be successful. In 2013, we awarded several repayable grants as part of the Innovation in Giving fund.
- ii. Convertible grant to equity: These grants convert into equity once revenue or milestones are met. They are particularly useful when funding social businesses limited by shares, and enable a possible financial return for the funder. We used this approach when funding Crowdfunder as part of the Innovation in Giving programme (see case study page 51) but we generally use this on an ad-hoc basis.

Why use convertible grants:

- Grants convertible to loans are suited for situations where it is not possible or realistic to make an investment (e.g. in an asset locked organisations or where exit timeframes may be too long). The approach can help recycle money and encourage trading for the recipient.
- It helps ensure that, in the very infrequent event that the grant ends up supporting the development of a highly valuable proposition, that the funder's contribution is recognised and compensated. It also helps justify use of public benefit funds in a scenario where private benefit may accrue.
- It provides financial support at a time when there is no evidence to support a credible investment, and therefore you need to start with a mindset that the money will be not be regained.

What to be aware of when using convertible grants:

- This type of grant funding requires specialist skills to be able to manage investments/ loans, such as setting the right conversion triggers and longer-term engagement with grantees to check on revenues – something which is often overlooked.
- You need to set the triggers at the right level to ensure you're not being 'gamed' (i.e. the targets are set at an unrealistic or unachievable level).

Please note: Because of the hybrid nature of these tools, it is extremely useful for the grant maker to have experience of both grant making and investment. For example, Nesta benefits from having an in-house team of impact investment managers who work alongside our programme teams.

e. Combination grant - grant combined with equity (used in accelerators)

This grant making approach includes the funder taking a small amount of equity in the organisation or business. It's typically used when supporting startup companies, often after they have completed an accelerator or incubator programme.

Since 2011, we have used this approach to support Bethnal Green Ventures, an accelerator programme focused on tech for good with a combination of grants, equity and loans. As such, Nesta holds a 28 per cent partnership stake in Bethnal Green Ventures (see case study <u>page 49</u>). After companies have completed the Bethnal Green Ventures accelerator programme they receive a £20,000 investment in exchange for 6 per cent equity and lifelong support to accelerator their idea.

Why use combination grants:

- While it's difficult to say which startups will be successful, supporting an accelerator with grant funding and small amounts of equity in those that complete the programme gives the funder a chance of return on investment and, if lucky, a share in a high value project.
- Accelerators invest in their cohorts for similar reasons.

What to be aware of when using combination grants:

- Startups require intensive support beyond just finance to be successful, which means you also need to invest in the right expertise and resources to make this happen.
- Returns need to be viewed in the long term when using this approach. Having supported Seedcamp, Bethnal Green Ventures and other accelerators, in most cases we think it's a minimum of seven years before you can judge return and potential successes.



Body & Soul received grant funding from Nesta's <u>Centre for Social Action Innovation Fund</u> for their Beyond Boundaries programme, a remote network for young people living with HIV to support one another as peers.

2 Challenge prizes

Challenge prizes offer a reward to whoever can first or most effectively meet a defined challenge. They can be used to solve problems in almost any field by incentivising innovators to develop new solutions. We believe that the best innovation challenges engage the broadest community of problem-solvers, creating high quality, lasting and impactful solutions – pushing frontiers and advancing society.

The topics of our prizes vary, but there is a consistent logic behind them. Using a challenge prize to solve a problem is different from other innovation methods. It opens a problem up to the widest possible pool of innovators – far beyond the usual suspects.

They are successful when they enable and stimulate the development of a whole range of new ideas, approaches and innovations around an issue or problem and are not only about the winner that solves the problem. They aim to do various things, including:

- Create better solutions: Prizes incentivise new thinking and reward the best solutions, wherever they come from, however they work.
- Bring together innovators and help them thrive: Prizes help innovators by providing access to information, ideas, profile-raising opportunities, investment and expertise.
- Unlock systemic change: Prizes raise awareness, inform policy and shape the future of markets and technologies.

Challenge prizes usually have multiple stages, with financial and capacity building support for the most promising teams. This is important in attracting new talented innovators to a problem or market that they have not engaged with before.



The Inclusive Technology Prize encouraged innovations that enable disabled people equal access to life's opportunities, and awarded £50,000 to Open Voice Factory to help bring its open source communication aid to market

History of challenge prizes

Prize-led advances include innovations in food and agriculture, aviation and space travel, energy and power, climate and the environment, health and medicine, design and architecture and government and social innovation. They are a tried and tested method, and have prompted a surprising array of developments through the past few centuries, including:

- The popularity of the potato as a human foodstuff in Europe, which was an outcome of the Academy of Besançon's Prize for Substitute Foods (awarded in 1773).
- Accurate marine navigation, which was an outcome of the British Government's Longitude Prize (awarded in 1765).
- The first aviators to cross the English Channel (in 1909) and the Atlantic (in 1919) thanks to the Daily Mail Prizes, as well as the first solo flight from the US to France (the Orteig Prize, awarded 1927).

In recent years, there has been a renewed interest in challenge prizes across the private, public and third sectors. The interest from governments and funders is especially notable.

Nesta's experience with challenge prizes

Our first prize, The Big Green Challenge, launched in 2007 and was a £1 million challenge prize designed to encourage and support community-led responses to climate change. In 2012 we went on to establish the Challenge Prize Centre to increase practical evidence and understanding about challenge prizes, so they can be used effectively by governments, charities and socially impactful businesses to have a tangible, positive impact on society. Our aim is to show that challenge prizes are not just effective at changing how things are done in the short term, but can also be used to help solve long-term social challenges (see Figure 4).

Since its launch, the Centre has run almost 30 prizes and advised on more. These include:

- Longitude Prize: Create diagnostic tests to improve prescription of antibiotics and fight antimicrobial resistance. Prize pot: £10 million (see case study page 53).
- **Open Up Challenge**: Create new tools using open banking standards that benefit consumers and promote competition in the banking sector. Prize pot: £2.5 million.
- Mobility Unlimited Challenge: Use frontier tech in robotics or artificial intelligence to improve assistive technology for people with lower limb paralysis. Prize pot: \$4 million.
- Dynamic Demand Challenge: Create tools or services that help shift electricity demand to off-peak periods or to renewable generation. Two of the teams who participated in this have subsequently gained multi-million pound investments. Prize Pot: £100k.

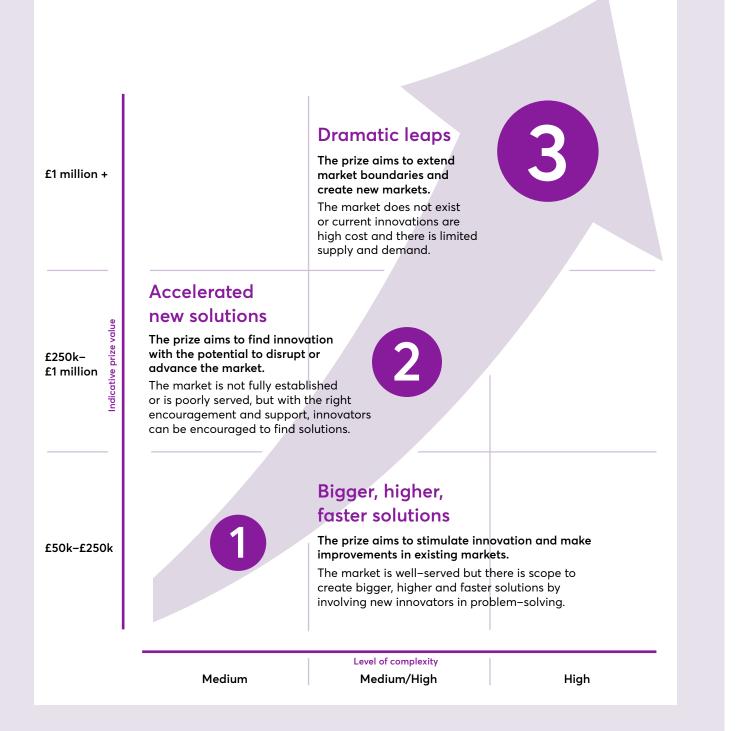
How we use challenge prizes

At the Challenge Prize Centre, we often describe the perfect prizes as being problems that are 'solvable but not too solvable'. We might rule out an idea for a challenge if we think it will be too easily met. At the other end of the spectrum, we might discount certain kinds of challenges for being too hard to meet at this time. We find that challenge prizes work well when they meet a few common sense conditions:

- You have a clear goal for the innovators to work towards a specific problem that they have to solve or task they have to carry out; not a broad catch-all for inviting improvements that could be disparate.
- You have identified a need for new problem-solvers a stagnant market, a market failure or a small sector that would benefit from new blood and new ideas.

- You are confident that you have incentives that will entice innovators to take part sufficiently generous funding, and low barriers to entry.
- You have a clear hypothesis for why the prize will make things happen faster or better than they would have done otherwise or else you will merely end up rewarding innovations that were already on track to happen.
- There is a credible market or path to adoption for the innovations after the prize has ended.

Figure 4: How the size of a prize might grow in relation to the complexity of a challenge



Most of Nesta's challenge prizes combine the incentive of a prize with a grant funding and incubation programme. This usually takes the form of one or more stages in a prize prior to the final award, in which the weakest teams are weeded out and the strongest are given financial and capacity building support to develop their innovations. An alternative model is to offer competitively-awarded seed grants to support innovators along the way (but where teams who have not received these grants are still eligible to win the final prize).

Regardless of the precise form they take, providing financial awards before the final prize increases the chance of a successful challenge prize. Financial support helps make promising but poorly-capitalised teams competitive when they would not otherwise be, increasing the range of innovations that judges can choose between at the final award. It provides a feedback mechanism that makes participation in the prize less risky: teams can discover a few months into a prize if they have no chance, rather than having to sink capital into a problem for years before finding out. And it makes a prize more competitive: there are multiple points at which teams compete, teams can identify their most formidable competitors, and it helps PR to show publicly who the frontrunners are.

Why use challenge prizes:

Challenges prizes are most useful in situations where:

- People might be working away at the problem from different angles but efforts are not co-ordinated or progress is not being made as quickly as is needed.
- There are stagnant markets with little innovation.
- The expertise exists to solve a problem, but there is nothing driving or supporting innovators to invest in solving the problem.
- There is a specific technological barrier to unlocking broader positive change.

What to be aware of when using challenge prizes:

- Any challenge you set needs to be well defined in order to have clear criteria for achieving success; vague challenges don't make for effective prizes.
- If the field your challenge is in is already well-funded, it may be harder (or more costly) to provide a meaningful incentive.
- Equally, if it seems as though there is only a small group of people in the world with the expertise and capital to develop a solution to a problem, then a prize might not be appropriate.
- Some issues require additional changes beyond financial incentive for instance regulatory or policy change which a challenge prize likely won't be able to solve.

For more guidance on setting up and running a prize, see our practice guide on <u>Challenge</u> Prizes.

3 Matched crowdfunding

Matched crowdfunding is the process by which public, institutional or corporate funding is combined with smaller donations raised from the public on online platforms. It has emerged over the previous few years as a new way to leverage support to get ideas and projects off the ground. These have ranged from small community projects to larger capital or regeneration-focused ventures.

There are now examples of matched crowdfunding being used by a diverse range of funders – including local and national governments, trusts and foundations, businesses with a focus on corporate social responsibility and universities and schools. This interest led to more than £1 million of matched funding being made available for crowdfunded projects in 2016, with horizon scanning of platforms showing that figure will rise substantially.

From a funder's perspective, such schemes attempt to not only make public money go further, but also use the crowd to test demand and help direct funds to causes which they know receive considerable public support.

There are two key differences that distinguish both crowdfunding and matched crowdfunding from more traditional forms of online fundraising:

- 1. A focus on projects: Crowdfunding involves raising funds for a specific project rather than for an organisation more generally, with fundraisers clearly defining how much funding is needed for a project and how the money will be spent. This means that those donating have a clear sense of what their money will be used for.
- 2. Campaign targets: Crowdfunding platforms require fundraisers to set targets based on how much money is required to complete the project. Most platforms are set up so that fundraisers only receive the funding if this threshold is met within a fixed period of time, typically 30 days.



The RSS Discovery Conservation Project successfully crowdfunded £41,795 in 35 days (see page 54)

While crowdfunding can help projects that are struggling for funding get off the ground, the real benefits in crowdfunding arise when it is used to tap in to more than just money. It should also be seen as a way of engaging new people in your cause; turning them into campaigners, potential volunteers or shareholders in your community project and hopefully repeat donors to your cause.

Nesta's experience with matched crowdfunding

Nesta has been researching and supporting the crowdfunding and alternative finance sector since 2010. More recently, we have been exploring matched crowdfunding as a key route to funding innovative ideas.

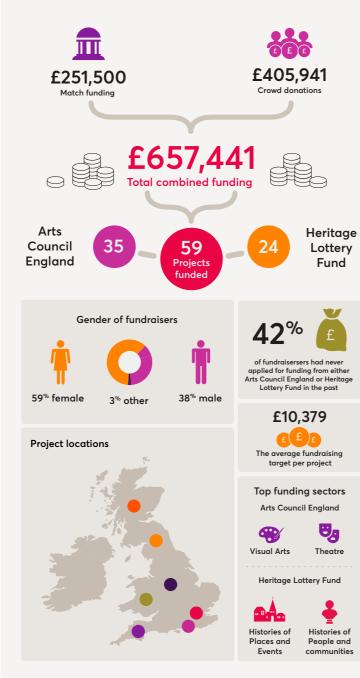
In 2017 we ran the £251,500 Matched Crowdfunding for Arts and Heritage Pilot in partnership with the UK's Department for Digital, Culture, Media and Sport, Heritage Lottery Fund, Arts Council England and Crowdfunder. The pilot explored how institutional funding can be matched with funds raised from the crowd on a crowdfunding platform (see case study page 54).

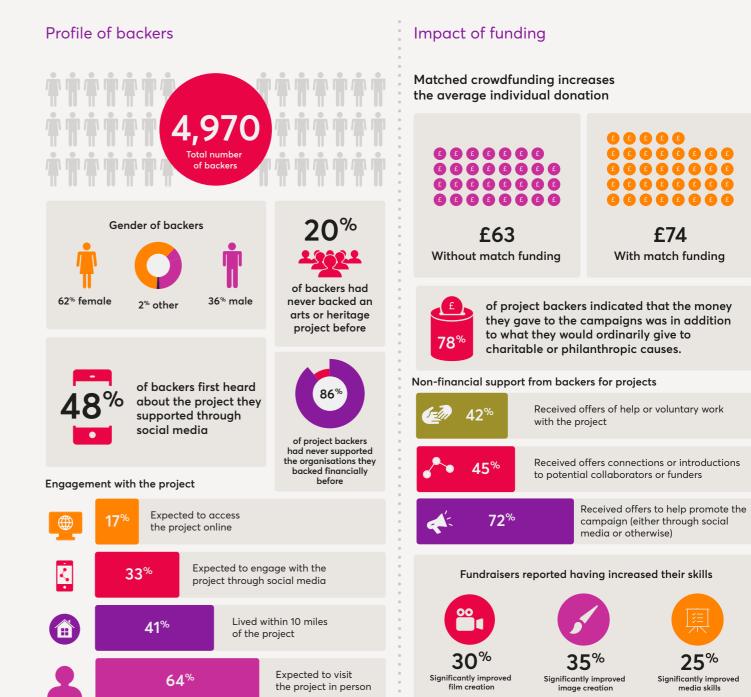
The £251,500 provided in matched funding helped leverage an additional £405,941, mostly from new supporters bringing new money to the sector. It also demonstrated a positive impact on volunteering and engagement in the arts and heritage sector.

These and other main lessons from the pilot are summarised in the infographic.

Matched crowdfunding for arts and heritage in numbers

What got funded?













In the same year we also launched <u>Rocket Fund</u>, a crowdfunding platform for schools. It is designed to enable more students to access the latest technology, while giving teachers the opportunity to find out what works in the classroom. Schools are given the opportunity to raise money from local businesses and the wider community in order to try new technology that would be beyond the reach of their budgets. After the schools have used the products for a few months, we ask for a review to help other teachers choose in the future.

Why use matched crowdfunding:

Crowdfunding can be a powerful tool for raising funds for projects with a social purpose, bringing with it a number of financial as well non-financial benefits:

- It can help fund projects that would otherwise not get funded by more traditional routes, and attract new supporters.
- It provides transparency on who and what gets funded, and taps into people's social as well as financial motivations to get projects funded.
- Running a campaign also helps to improve marketing and raise awareness.
- It offers speed, as crowdfunding is typically considerably faster and potentially cheaper than undergoing a lengthy grant application process or more traditional fundraising methods.
- It allows for increased experimentation and reduces the cost of failure, as organisations don't have to commit any money to developing the project (beyond the resources they put into the fundraising campaign) until they hit their funding target.

What to be aware of when using matched crowdfunding:

- As it's based on the idea that people 'vote with their wallets', there is a risk that crowdfunding can have a negative impact on diversity, equality and participation.
- You still need to think about the balance for one-off support through crowdfunding against the need for long-term finance and sustaining a project.
- There can potentially be conflict between the crowd's and the organisation's priorities.
- It's not easy to run a successful campaign they require dedicated teams and careful planning, often months in advance of going live.
- There are limits on the size of what can funded.

4 Impact investment

Impact investing is an approach to investment that aims to generate specific beneficial social or environmental outcomes in addition to financial return. Understanding, quantifying and reporting the social or environmental impact that results from investment decisions is a crucial component of impact investing.

Impact investment uses a range of financial instruments that are commonly available to businesses such as debt, equity and convertible loans. Impact investors select the instrument that is most appropriate to the recipient organisation and what the funds are being used for. For example, a charity cannot issue shares, therefore debt financing is likely to be used; whereas an early-stage social business is unlikely to be able to accomodate debt on its balance sheet, or indeed repay interest and/or capital from revenues, therefore equity is likely to be more appropriate.

Impact investors operate across a spectrum. Some prioritise social return over financial, perhaps tolerating a below-market rate of financial return or particularly high level of financial risk, hand-in-hand with a strong social return. Others expect a market-rate level of financial return alongside positive social impact. The strategy and motives of an impact investor, and where it sits on the spectrum, are often influenced by its funders and what they are seeking to achieve with their capital.

History of impact investment

Modern impact investing developed in the UK in the early 2000s, primarily through the supply of credit to charities and social enterprises in a relatively benign financial environment. The global financial crisis of 2008 has played a role in changing attitudes to finance, and there has been a concerted effort to develop an impact investment industry since.

Early institutions such as Charity Bank, CAF Venturesome and Bridges Ventures (amongst others) pioneered a range of models for supplying finance to organisations pursuing a social objective in a way that could also provide a repayment of capital with a return. Over more than a decade, the UK government has provided policy and financial support to help develop the field, to the extent that Big Society Capital, a wholesale fund of up to £600 million for the impact investment sector, was established in 2012 to help accelerate the development of social impact investment in the UK. Since then, a diverse range of fund managers and advisors has emerged to provide investment capital to charities and social businesses across the UK.

Many innovations in impact investment approaches – such as social impact bonds (see <u>page 39</u>) – are now being trialled. However, the track record of the field is too short for us to draw robust conclusions about performance in terms of risk, financial return or impact. Patience and iteration are required to support and advance this field, as they are in any other area of innovation.



Nesta Impact Investments has invested in Third Space Learning, a provider of one-on-one maths tuition online (see page 57)

Nesta's experience with impact investment

Nesta has been a significant catalyst in the field of social impact investing. From 2008-2011, we built a portfolio of investments in impact investment funds, products and advisory firms before starting to make our own direct impact investments into innovative, socially motivated businesses in 2012. And our research on topics such as the behavioural insights of making social investments, the role of tax incentives in the field, and the nature of demand for finance have contributed to the policy environment. In the following sections, we go through some of the financial tools that impact investors can use.

We believe impact investment is a tool that can be used to improve the lives of individuals and communities at the same time as achieving attractive financial returns. Ultimately, we hope our experience will encourage more funders to enter the space and increase the amount of capital available for socially impactful ventures. On a more granular level, impact investment allows us to have an in-depth understanding of the social impact of the organisations we support, and a seat at the table to influence business decisions that affect that impact.

We have learnt that 'Impact' means different things to different people so it's important to work out where on the spectrum of impact investment you sit, and what impact means to you. Impact assessment and measurement is a complex task, and landscape and impact investors need a clear impact strategy and approach to measurement. In addition, social ventures in receipt of impact investment benefit from having clear alignment between commercial and social impact success to avoid a situation when one (normally social impact) is compromised in turn for the other.

Impact investment can take many forms, but typically it is issued from 'fund' vehicles which require the investment of time and money to set up, staff to operate and of course fundraise for (if there is to be more than one funder).

How we use impact investment

a. Loans

A loan is best described as money lent to an organisation with contractual obligation to repay the initial loan together with interest. Loans can be a useful way of recycling money for a funder, and are a straightforward offer to the recipient. Whilst charities and social enterprises can obtain loans from traditional banks, loans are not an extensively used funding tool to support innovation. This is because they are best suited to funding programmes with highly predictable and steady outcomes that support the consistent interest and capital repayments associated with debt.

A criticism of the use of loans by programmatic organisations for funding innovation is that they are no different from banks or other funding sources, and therefore provide little 'additionality' into an existing funding market. The trick therefore is how you differentiate them from other sources of loan finance.

Nesta's experience with loans

As with grants, there are variations and adaptations of loans that can be used, and in 2017-2018 we provided £3.3 million via loans. Historically, Nesta has used loans on an ad-hoc basis, when a loan is chosen as a more appropriate financial tool to use as opposed to a grant or equity. However, in recent years we've been developing our expertise in running large impact investment funds with partners that award loans.

In 2015, Nesta launched the <u>Arts Impact Fund</u> in response to our report *The new art of finance: making money work harder for the arts*, a collaboration of public, private and charitable partners – Arts Council England, Bank of America Merrill Lynch, Nesta, Esmée Fairbairn and Calouste Gulbenkian Foundation. In 2017, Innovate to Save, in collaboration with Welsh Government, was launched to support new ideas for delivering better public services in Wales through a new model of blending different kinds of finance (development grants and significant financial loans) together with intensive support.

Over the investing period of the <u>Arts Impact Fund</u> (summer 2015 – spring 2018) we made around 20 loans totalling just under £7 million, and we expect to get our money back by 2023. Loans were made between £150,000 – £600,000 to arts organisations with ambitious plans to grow, achieve great artistic quality and have a further positive impact on society. The repayment terms were flexible in that we try to fit them around what borrowers can reasonably afford over a given period, so we allow things like capital repayment holidays and bullet capital repayments (e.g. payment is made at the end of a loan) where necessary. The interest rates have ranged from 3 per cent – 8.25 per cent, depending on our perception of risk and commerciality of the investment proposition.

For more detail see case study page 55.

Innovate to Save is a new programme and is expected to award interest free, unsecured loans between £100,000 and £3 million to projects that support the delivery of better public services in Wales, whilst also delivering cashable savings. The repayment term is based on the speed at which savings (or in some cases, new income) can be generated currently up to a maximum of around ten years. We expect our support for the fund to operate over a period of two to three years, from ideation to implementation, at which point responsibility for managing loan repayments returns to Welsh Government.

For more detail see case study page 56.

i) Project specific loans

These are loans linked to a specific project rather than an organisation. Funders can design loan funds to target areas in need of innovation – such as Innovate to Save supporting improved public sector delivery – or to bring new funding streams to targeted areas, as with the Arts Impact Fund bringing loan finance to the arts and cultural sector. As with any loan, you need to decide on the right repayment conditions to entice projects, what loan value you want to award and length of repayment.

Repayment terms can vary but essentially you need to agree the length of time you have to repay, interest rates and special payment or penalty conditions. Outlined below are some of the conditions you can use when setting interest rates or special payments.

- Only repayable if successful referred to as a 'repayable grant' (see page 21).
- · Interest free repayment or low interest repayments.
- Capital repayment holidays when you are able to take a few months off from repaying your loan, to be agreed with lender.
- Bullet capital repayments when a lump sum payment of the entirety of a loan amount is due at the end of the loan term. This is used to help reduce monthly repayments.

Why use project specific loans:

- Loans are a straightforward offer that is well understood and can be attractive to the recipient if the funder offers more beneficial payment returns than other sources of loan finance.
- They can bring new funding streams to targeted areas, although they should not been seen as a substitute for other funding.
- They can drive financial sustainability and encourage trading for the recipient, while enabling the funder to recycle money and support socially impactful ventures.

ii) Convertible loans to equity

These loans offer the funder rights to convert their investment into equity once specific conditions are reached such as revenue targets or milestones, a future equity round or the sale of a company. This type of loan is only applicable for organisations with shares, but provides the opportunity of an increased return to the funder. It's often used when an investor can't agree a valuation with a management team, or when the investor is seeking to gain protection of capital/advantage over other stakeholders. We've predominately used this within Nesta's Impact Investment team.

Why use convertible loans to equity:

- This approach can achieve financial return for the funder and support for socially impactful ventures.
- A convertible loan gives the investor a significant reduction in risk in their investment without losing potential profit.



A workshop for Innovate to Save as part of the programme's development phase, which happens in advance of loan finance approval (see page 56)

What to be aware of when using loans:

- You need to be conscious of the obligation that debt places on the borrower.
- At the same time, you must be mindful of your own appetite for risk and possible failed repayments.
- You also need to be realistic about your appetite to take remedial action (forcing repayment, taking security, administration) in the event of underperformance.
- Do not underestimate the time spent and expertise required on due diligence in making recommendations for loan finance.
- You'll require ongoing specialist skills to be able to manage investments/loans, set the right conversion triggers or repayment models and engage over the longer term with recipients to check on revenues.

Please note: Legal and commercial terms relating to loans can be complex and should ideally be set by people with specific understanding of the implications of this type of finance. Nesta benefits from its in-house impact investment team and legal team who provide support and guidance on these issue.

For more guidance on impact investment, see our practice guide on <u>Investing in Innovative</u> Social Ventures.

b. Equity

Equity is permanently invested capital, giving the investor a share in the ownership of an enterprise. It typically carries no fixed repayment or interest requirements, and investors recover their capital and make a return by selling their shares to a new owner – hopefully at a higher price than they themselves originally acquired them. Equity capital is the most suitable form of investment for funding innovation in an organisation that is able to raise it (companies limited by shares, some partnerships) as it is highly tolerant of risk and places no significant ongoing financial obligations on the recipient of funds.

However, taking equity investment on board comes with other obligation and investors will often expect to play a role in corporate governance, and may set expectations about achieving a sale of the company within a particular time-frame. Whilst in its simplest form equity is very straightforward, the terms of an investment tend to be highly specific to individual situations – usually resulting in relatively complex legal and financial structures.

Nesta's experience with equity investments

As with grants and loans, there are variations and adaptations of equity that can be used. Since we started making equity investments to support innovation in 2005, we have invested £45 million in innovative businesses.

Nesta invests equity both directly from our own resources and also through a third party financed fund. We invest into mission-led businesses that operate in sectors that we understand well; health, education, government innovation and the creative economy. These are areas where our broader networks and knowledge can help management teams as much as our cash, and our impact investment teams benefit deeply from the experience of our programme teams who bring deep insight into the needs and opportunities in these fields.

We invest in very early-stage businesses that have typically just secured their first clients and who are delivering products and services that have high social and financial return potential. Investments are between £150k and £3 million, and we seek to support companies for many years as they develop. We look for businesses that are:

Scalable - addressing very large markets and user groups
 Sustainable - meeting a valued market need
 Significant - with evidence of social impact effectiveness
 Accessible - to disadvantaged population groups
 Mission aligned - minimising risk of conflict between social and financial outcomes



Oomph! provides exercise training and runs excursions services for care homes, and is one of the social businesses supported by Nesta Impact Investments (see page 58)

How we use equity investments

Nesta provides financial and capacity building support to businesses looking to create and scale innovative solutions to social challenges over a long period of development. We support innovations that tackle the major challenges faced by older people, children and communities in the UK. We expect high returns on our equity investments, but tolerate a high level of risk and get our returns by selling our positions to other investors rather than requiring repayment by the companies we back.

We have a strong focus on evidence to understand the nature of the problem being targeted, as well as the evidence behind the intervention that the venture is providing to ensure it is rooted in best practice. We are able to leverage the institutional knowledge and reach within Nesta to make better investment decisions and support our portfolio of investees with networks and insights. As an impact investor we evaluate impact risk and impact return before, during and after an investment, based on objective qualitative assessment and quantitative data.

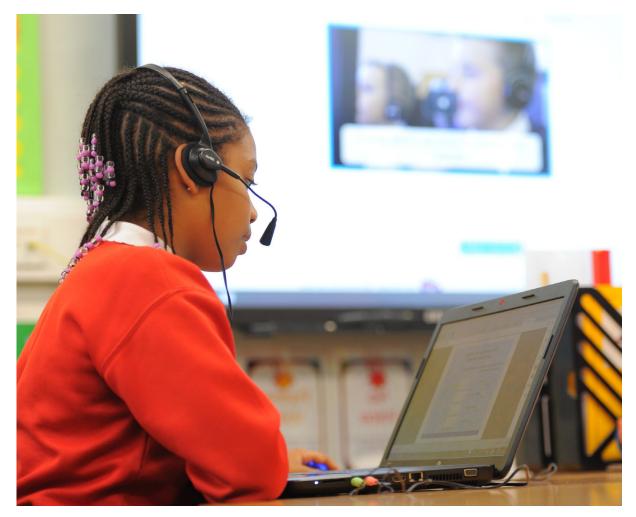
Why use equity investments:

- Equity is patient, risk tolerant, long-term funding that is suited to uncertain outcomes and timeframes.
- It can achieve a significant financial return for the funder and support for socially impactful ventures.

What to be aware of when using equity investments:

- Equity is a permanent form of capital. It's hard to get out of equity relationships for investors and investees. Make sure you know what you are getting into before you sign on the dotted line.
- Equity investors also typically need to provide extensive capacity building support (nonfinancial support) alongside cash.
- Be mindful of your appetite as an investor for risk and possible failure.
- Be realistic about your appetite to take remedial action in the event of underperformance.
- Do not underestimate the time spent and expertise required on due diligence in making recommendations for equity finance.
- You'll require ongoing specialist skills to be able to manage equity investments and engage over the longer term to manage your portfolio.

Please note: Legal and commercial terms relating to equity investments are complex and should ideally be set by people with specific understanding of the implications of this type of finance. Again, Nesta has an in-house impact investment team and legal team who provide support and guidance on these issue.



Nesta Impact Investments has invested in Third Space Learning, a provider of one-on-one maths tuition online (see page 57).

c. Social impact bonds

A social impact bond is a form of impact investment that provides finance to outsourced providers of public services. The finance enables the provider to fund the delivery of services, which are subsequently paid for in arrears under a contract with government. The payment from government is calculated based upon the improved outcomes for service users achieved by the service. This is referred to as outcome-based payments.

Nesta invested along with others in a social impact bond for Reconnections, a service to reduce social isolation and loneliness in later life delivered throughout Worcestershire (see page 59).

The concept of social impact bonds was developed in the UK, and is often cited as an example of financing social innovation. It was first applied by the organisation Social Finance to the problem of re-offending by prisoners. In that example, investors provided finance to a consortium of charities that support ex-offenders, and investors were repaid in proportion to the reduction in re-offending by those ex-offenders receiving the service.

Why use social impact bonds:

Social impact bonds have the potential to support social innovation in the following ways:

- Outcome-based payment contracts can be drafted to allow the delivery organisation significant flexibility and the scope to innovate in the means of delivering the service.
- By providing the opportunity to raise third party finance to fund service delivery ahead of outcome-based payment. This can enable the delivery of innovative services that otherwise would not receive funding (or would be funded at lower scale) due to budgetary constraints. For example, investing in the prevention of re-offending is difficult as prison budgets are required to keep offenders incarcerated.

What to be aware of when using social impact bonds:

The social impact bond and outcome-based payment structure is an innovation in financing for impact in itself. However, it should not be assumed that all financing of this sort is enabling innovation. It is possible to imagine that governments and others may switch their contracting terms to Payment by Outcomes, but then commission the same services as before. For government, risk and indebtedness have been transferred to a third party; but innovation has not necessarily been supported.



Reconnections is a service to reduce social isolation, which Nesta has co-funded using a social impact bond (see page 59)

5 Other funding tools

Service contract to support innovation

A service contract allows you to procure services from an organisation, and in this context can be used to help organisations trade and grow. Nesta is not typically the customer of the innovations we support, but we have adopted this approach when designing challenge prizes where the reward/incentive is 'advanced market commitment' – a commitment to purchase the winning solution.

The risk is that you are reliant on a fairly untried provider but it can help organisations grow and make them more financially sustainable.

Accelerators

In the Grants section we touched on accelerators as a model, and how they combine grants with equity to support startups. The term 'acceleration' has a broad definition within the startup community, but in our view accelerators differ from traditional business incubators in several important ways. Typically, accelerators have the following characteristics in common:

- An application process that is open to all, yet highly competitive.
- Provision of pre-seed investment (around £10k to £50k), usually in exchange for equity.
- A focus on small teams not individual founders.
- Time-limited support, usually between three to six months, comprising programmed events and intensive mentoring.
- · Cohorts or 'classes' of startups rather than individual companies.

Not all accelerators are the same, however. Some important areas where accelerators may differ include in their mission, specialism and funding structure. For example, a venturebacked accelerator typically exists to provide better deal flow for investors, whereas a government-backed accelerator may be established with the goal of local economic development.

For more guidance on accelerators, see *Nesta's Startup Accelerator Programmes: A practice guide*.



Bethnal Green Ventures, an impact accelerator invested in by Nesta (see page 49)



Designing funds

Money, of course, is only one element of funding innovation. All of the mechanisms in this guide require thorough planning, effective management and active engagement to be successful. In this section we cover some of the key elements that cut across our different approaches to designing funds, whether that's grants, loans, investments or challenge prizes.

Defining and scoping the field

Before setting up a fund, we spend time upfront researching the field and what fund structure and design would be most suitable. This includes thinking about:

- What's the goal? The primary goal of a fund may be to generate new ideas and solutions, scale promising innovations or achieve cashable savings. These goals will lead to very different design options such as timescale (e.g. digital innovation can be prototyped relatively fast; change in large public sector organisations can take much longer to become sustainable) and grant size (e.g. a small startup can use £50k effectively, while within a large organisation smaller projects can lose visibility and traction).
- Adding most value. When designing and scoping new funds, we always ask ourselves where Nesta can add most value, and where we can minimise the risk of duplicating the work of other organisations. What can we contribute to this challenge or opportunity? Who should we partner with to have greater impact? It's worth noting that Nesta predominantly works in partnerships with others when designing and running innovation funds.
- **Research informed**. We use external and internal research to scope and design new funds. For example, the <u>Digital Makers Fund</u>, which looked for ideas to enable young people to understand and create technology, was created in response to our <u>Next Gen</u> report that argued for computing to be put on the school curriculum. Our investment team also uses existing education research to make judgements on the potential impact of their investments e.g. investigating the academic literature on tutoring before investing in Third Space Learning.
- **Risk**. An appetite for risk is a prerequisite for running any innovation fund, but you need to decide what level of risk you're comfortable with and is appropriate for the fund. Generally, you'd expect a higher success rate when backing more proven innovations in comparison to backing new ideas. Always ask yourself what proportion of projects do you expect to succeed, and how will you measure that?
- Eligibility. Who is the fund aimed at public sector, charities, startups? Understanding this will help structure your eligibility criteria. Nesta awards funding to a variety of organisations (charities, social enterprises, social ventures) because we believe the best solutions come from the broadest range of problem-solvers.



<u>Rocket Fund</u> is a crowdfunding platform run by Nesta that helps schools purchase the latest technology by fundraising from businesses and their community

Finding the best innovations

We are proactive in seeking out the best applicants and use different tools to improve the number and quality of applications. These include:

- **Pipeline development**. Just like an investment fund, we are proactive in finding good ideas and encouraging people to apply. This is fundamentally opposed to how some grant funders work, but we know that not all innovations will be looking for funding, or think that they might have success applying. Some brilliant innovations are operating abroad and could be replicated in the UK, so we might approach them directly to seek their interest in expanding to the UK. Or we might offer funds specifically to UK organisations to replicate a good idea from overseas.
- Targeted calls for ideas. Some funders are open to applications all year round under broad headings. We have found more success issuing specific and targeted open calls. These are open for a period of time, whether a few weeks or a rolling assessment period. Whilst we want to get as many quality applications as possible, much of our process is designed to put some people (who are not likely to be successful) off applying, so as not to waste their time.
- Actively promote the fund. We write, blog and tweet to publicise funding opportunities and encourage new entrants. This includes publicising in different publications, linking up with partner organisations to promote the funding opportunity and giving more details on the fund and ideas we're looking for. We host webinars and seminars to allow applicants to talk directly to the fund managers and share/shape their ideas. We find that this approach encourages organisations to join forces or helps them to realise the fund is not for them, saving them the time of applying.
- Two-stage application process. We frequently use a two-stage process for our grantfunded programmes. This might be a very short Expression of Interest form (e.g. with no more than ten questions), which creates a low bar to entry in order to increase the number applications but also helps reduce the amount of time anyone might spend developing a proposal. For larger funds, we might provide capacity building grants to support applicants to develop their proposal in collaboration with us.

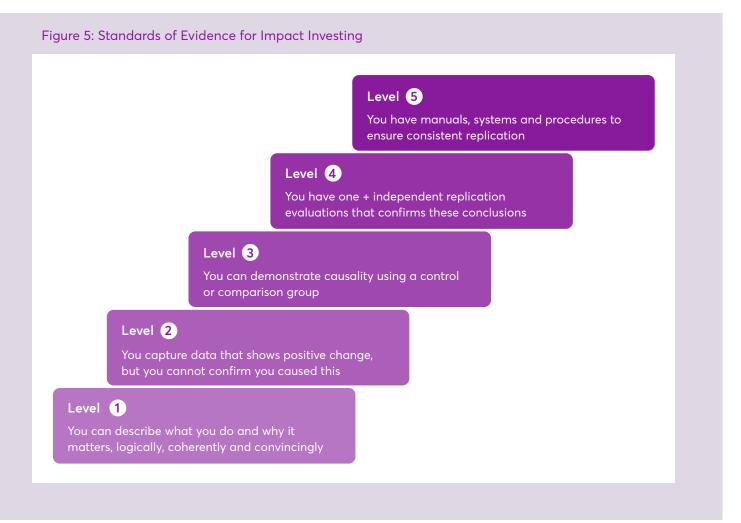
Selecting the best innovations

Once we have received applications, the process of selecting which to fund then begins. This is often a balance between collaboration and independent decision-making – using experts to help assess, looking at whole portfolio risk, careful due diligence including getting insights from customers and commissioners, and understanding the supply and demand for innovation (see Section A).

- Intensive application advice and support for shortlisted organisations. We have found we get the best results when we shortlist a smaller number of 'Expressions of Interest' with promise, and then invite them to submit a fuller, longer application. However, this comes with significant investment of staff resources from Nesta to collaboratively develop full proposals with regular feedback and support. Nesta's staff act as critical friends at this stage, as opposed to simply carrying out due diligence on first drafts.
- Systematic integration of our standards of evidence within selection. Our Impact Investments team pioneered the use of standards of evidence to select investees (see Figure 5). We often apply the same criteria to our grant funds – all applicants must have at least a Theory of Change which explains why what they do (or want to do) will logically have an impact on the ultimate outcome. We might reserve larger grant award amounts for those innovations which can demonstrate correlation or causality.
- Using experts to help us make the final selection. We often invite advisory panels to provide expertise and challenge our full proposals. They may not be a formal selection panel, but rather be asked to examine proposals as part of our due diligence process and to help us think about what might have been overlooked, etc. They also offer us an opportunity to engage with key stakeholders and promote the fund.
- A 'whole-portfolio' view of risk. As an innovation funder, we actively manage risk and have a higher appetite than some other funders. We also deliberately build a range of risks into our portfolio. On the £10 million prototyping fund Innovation in Giving, we had a high appetite for new ideas, and consequently risk, so accepted that half of our initial grant awards might not lead anywhere. To make best use of the fund, we therefore used stage-gate funding to ensure more money reached the more promising ideas. Even on funds used for scaling innovations, such as the Centre for Social Action Innovation Fund, where we backed more proven innovations so expected much higher success rates, we find there is room to award a handful of grants to higher risk innovations which, if successful, could deliver high impact.



Dance organisation Studio Wayne McGregor used a cashflow loan from the Arts Impact Fund to complete the construction of its new studio space in the Queen Elizabeth Olympic Park (see Case study on page 55).



Capacity building support

Nesta is a 'high support, high challenge' funder. We stretch and challenge our innovations but also give them valuable, often bespoke, advice and capacity building throughout the lifetime of a fund.

We believe capacity building is equally important as financial support. This is because we are supporting people to do something new, without a clear precedent to follow, whether that is prototyping and testing new ideas or helping more established innovations to scale – where the focus is often on business modelling, sustainability planning and organisational development. For example, on the Centre for Social Action Innovation Fund, we spent £3 million of the £14.5 million budget on capacity building support and programme running costs. This was deliberate, but an unusually high investment compared to other grant funds.

- Improving the quality of evidence. We pay particular attention to improving the quality of an innovation's evidence of impact, as we know that this improves their chances of sustainability and growth. Within our impact investment portfolio and our scaling funds, a commitment to evidencing impact is integrated into our grant making and investment, and this is a very significant part of how we work with innovations. To do this, we provide support for innovations to:
 - Design and commission evaluations; strengthen their own data collection, monitoring and evaluation processes; and build their confidence and capability to work with evidence.
 - Build a systematic monitoring and evaluation schedule into their grant milestones to ensure a continued focus on evidence.
 - Have evaluations/data externally validated, notifying innovations if their new impact evidence enabled them to move up the standards of evidence.
- One-to-one support and advice. Our staff manage a small portfolio of innovations (around 7-10 each), so are available to provide high support. Typically areas for support include marketing and communications, business planning, financing and fundraising, governance, providing a platform to share work with key influencers, attending board meetings or pitches, and co-designing learning and evidence approaches serving both to support delivery of the immediate programmes, but also to prepare for longer-term sustainability. However, the most valuable advice we offer is often as a critical friend, providing a mixture of encouragement and accountability.
- Learning as a cohort. We know that providing the time and space for people from across sectors and disciplines to come together creates energising conversations as well as new collaborations and partnerships. This is an integral part of how we work. We have experimented with formats, including running learning exchange events for Innovate to Save where we identify and invite the most exciting and relevant global innovations to discuss their work, through to using webinars to share learning and collaborate on the Creative Councils programme. We do this throughout the lifetime of a fund, bringing people together to learn from one another and to access a vibrant mix of inputs from mentors, advisors, experts in technology and finance, policymakers and other funders.
- **Bespoke training and advice**. Whether one-to-one or in groups, we commission technical training and support, for example legal costs to set up affiliate agreements or technology consultants to build new contact management systems.



Summary

We hope that the financial tools and approaches outlined in this practice guide help to encourage more creative thinking about how to fund innovation for the public good, and that the guide provides a greater awareness of how they can be used. Regardless of the stage of innovation or the financial approach selected, it's helpful to keep in mind the following:

Innovation and risk

Funding innovation is inherently risky, which can often mean that funders shy away from doing so or are unsure of the right tools to use. However, a range of financial approaches can be used in different ways to manage that risk. For example, Nesta uses stage-gates in challenge prizes and innovation grant funds to manage the quality of innovations and ensure money is diverted to the most promising (see page 17). Convertible grants are another way of managing the risk of grant making to organisations that may go on to make considerable profit in the future (see page 21).

Grants that are dependent on revenue or match funding can also help manage risk, as they help incentivise others to invest or release money only when demand for an innovation is shown. In addition, matched crowdfunding creates support to get ideas and projects off the ground, but can also engage new people in a cause and help create demand.

Capacity building

Funding innovation on its own is never enough. As a funder you are supporting innovators to do something new without a clear precedent to follow, and you also want others to learn from your work. Support needs will vary depending on the stage of innovation, sector and model of change but could include business modelling, prototyping, evidence design and collection, communication, marketing or fundraising. You will need to allocate additional funds to provide this support, whether it is delivered internally or commissioned externally.

In-house expertise

Financial tools such as coveritible grants, project specific loans or equity investments require specialist expertise to set the rights terms and conditions, and then to manage them. Nesta benefits from having an in-house legal team, impact investment team and experienced grant managers, which has enabled us to experiment with a hybrid of financial tools. In addition to the financial management of innovations, funders also need to support and challenge throughout the lifetime of a fund. This involves working intensively with the innovations through regular check-in meetings where evidence and progress are discussed, and ongoing mentoring and capacity building support that is often bespoke to an innovation's needs.



Case studies

Grants

Digital R&D Fund for the Arts

The Digital R&D Fund for the Arts had three core aims: to support ideas that use digital technology to build new business models; to enhance audience reach for arts and culture organisations; and to encourage collaboration between arts, technology providers and academic researchers.

A partnership between Nesta, Arts Council England and the Arts and Humanities Research Council (AHRC), the fund was born out of a shared feeling that the arts could benefit from structured R&D that we take for granted in science and technology. Cultural institutions, while constantly innovating and developing new approaches to performance and production, lagged in terms of experimenting in their approaches to audience development and business models. A key element of the fund was encouraging these partnerships between world-class talent in arts and cultural organisations, technology providers and researchers to achieve this goal. We were keen to test how publicly-funded R&D, with a strong focus on rigorous and systematic research, could develop new products/services to be used by other organisations in the sector, creating great art for everyone.

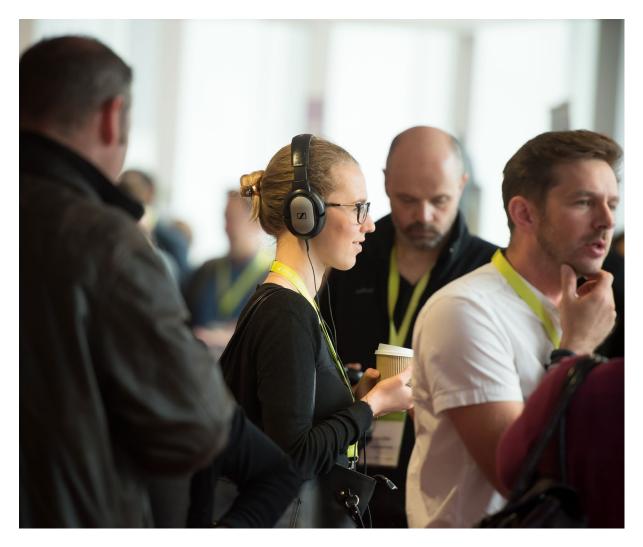
Financial approach

£7 million was made available via grants over the period 2012-2015 for projects up to a value of £125,000. Two new strands within the fund were introduced in 2013 to encourage applications around big data and research, with grant funding up to £300,000. Funded arts organisations asserted that the R&D work undertaken would not have been possible without the fund – they could not have selffinanced, other public funding sources were not available and commercial investors have yet to show an interest in collaborative digital R&D in the arts.

Outcomes

The fund opened up a sector-wide conversation, particularly for the funding partners and larger arts organisations, on the role of R&D in the arts and on risk, collaboration and innovation. Through a process of 'learning through doing', the fund introduced an open, collaborative and partially audience-driven approach to organisational, content and product development.

The fund also acted as a demonstrator, providing unique insights into the ways in which researchers and technology companies can collaborate with arts and cultural organisations and engage in mutually beneficial knowledge exchange. It brokered the real-world and live application of academic work with the arts and technology sectors. This in turn influenced the approaches of academics to collaborative problem-solving, as well as their understanding of the benefits and challenges of cross-sector working. This has generated new knowledge and some transferable practices in areas such as big data collection and increasing accessibility for audiences.



Making Digital Work, Digital R&D Fund for the Arts Event

What next?

In 2016-2017, Arts Council England and Nesta piloted an accelerator programme (Digital Arts and Culture Accelerator) for nine organisations from the fund – aiming to increase their potential to draw in investment from social and commercial sources. Meanwhile, the AHRC has continued to track the academic outputs of the research partners to establish the long-term impact of the fund from a traditional R&D perspective. AHRC also funded University College London to propose definitions of R&D in the arts and culture that can be used to inform public policy in an area which is conventionally restricted to science and technology.

While the number of exciting and groundbreaking examples of technology use continues to grow, collectively, the sector still has some distance to travel if it is to derive the full benefits that digital can offer. These questions are critical for future investment considerations in the arts. *The Culture White Paper*, published by the DCMS in March 2016, signalled that the capacity of the arts to reach out, connect and make a difference to people's lives, has become a core policy agenda.

Bethnal Green Ventures

Bethnal Green Ventures is a leading accelerator programme for ventures using technology to achieve social impact. The objectives of the investment and the programme were twofold: to promote the use of technology for social impact; and to demonstrate the effectiveness of the technology accelerator model in starting and growing viable technology-based social ventures.

Every six months, BGV selects around ten teams to start new social ventures that wish to develop a technology-based product or service to address a social need in healthcare, education, civic engagement or the environment. Teams participate in a 12-week programme of education, support, mentoring and receive £20,000 for 6 per cent of the equity in their venture. The programme ends with a demo day attended by investors, customers and supporters.

Financial approach

Grants were used to fund the establishment costs and non-investment expenses, while loans and partnership investment were used to fund investments into the underlying startups and some of the fund management costs. The grants helped the business scale faster than would otherwise have been possible.

Nesta began its support for Bethnal Green Ventures in 2011 when we funded its second accelerator cohort of six ventures from our 'Social Venture Intermediary' funding (SVI was a precursor fund to the establishment of Big Society Capital). We have subsequently provided further investment and grant funding to support the accelerator programme for seven years, alongside funding from the Cabinet Office and Nominet Trust, and more recently Big Society Capital.

BGV LLP 1 is the vehicle which makes investments in new startup social ventures, buying 6 per cent of equity in each company for £20k. We hold a 28 per cent partnership stake. Over the past seven years we have provided the following funding:

- 2011: £100,000 loan and partnership investment to fund investment in six ventures; £50,000 development grant.
- 2013: £380,000 loan and partnership investment to fund investment in 80 ventures over four years; £320,000 programme management grant.
- 2014: £100,000 grant to fund post-accelerator support for promising ventures.
- 2015: £150,000 grant to fund accommodation costs in lieu of access to Nesta's premises.
- 2016: £100,000 loan and partnership investment (alongside Big Society Capital).

Outcomes

Nesta's support, alongside Nominet Trust and the Cabinet Office (and more recently Big Society Capital), has enabled BGV to grow its operations and build its reputation. They have now supported around 90 teams to establish companies, of which around 60 are still operational.

What next?

BGV is in the process of raising its second investment fund, which will be six to seven times larger than its first fund.

uMotif - 100 for Parkinson's

Nearly every smartphone has powerful sensors within it, which can gather data that has huge value for both self-management of health and health research. For diseases of motion, such as Parkinson's, these sensors can accurately capture key symptoms like tremors, rigidity, degree of coordination, etc. Even ten years ago this data would have to be captured in a lab at great expense; now anyone can do it from anywhere. This presented an opportunity to gather huge amounts of high quality research data at low cost, to learn how to use this data better, but only if large enough numbers of people could be engaged as citizen scientists.

The 100 for Parkinson's project sought to engage both people with Parkinson's and those without, challenging them to record their data using a specific app for 100 days. This data was then made available for research use, and was also of immediate use and value to any person living with the disease.

Financial approach

As part of the <u>Centre for Social Action Innovation</u> <u>Fund</u>, we resolved to explore the potential of this data donation. Doing this well would require not only top end digital design skills, but also for the branding and networks of organisation to be credibly focused on the public good.

As part of this we gave a grant to a private company, uMotif, to build and market 100 for Parkinson's, with oversight of the project from the Cure Parkinson's Trust and Parkinson's UK, as well as ourselves.

Grant giving to private companies remains unusual, chiefly due to concerns around public versus private benefit. In this instance, we were able to ensure that public good was generated by contractually agreeing on a permanently open research data set, an app that was free to the general public and sharing learning about citizen science and what made it work. By structuring the grant around these conditions, we were able to ensure that the public good hugely outweighed the private benefit accrued - largely reusable code and brand awareness for uMotif.

Outcomes

The project generated great coverage, including in *The Guardian* and on BBC breakfast news. 100 for Parkinson's went on to gather data from around 4,500 people in 50 countries and created a research dataset of 2.2 million data points, making it the largest Parkinson's tracking study that had ever been conducted.

Our grant catalysed further funding and support from a wide range of bodies, such as the London School of Hygiene and Tropical Medicine and Boston Scientific - the value of which exceeded our grant. The success of the project also allowed uMotif to form a partnership with Oxford University to develop further apps for gathering data on a range of conditions.

Crowdfunder

Crowdfunder is a crowdfunding platform that helps raise money for business ideas, charities, community groups, sports clubs, political movements and more. To date, it has raised over £50 million for more than 20,000 projects. Crowdfunder was formed out of a merger between two smaller sites - digital agency Keo's Peoplefund.it and Crowdcube's reward site, Crowdfunder.

Nesta initially invested in Crowdfunder through our Innovation in Giving Fund as it is the leading rewards-based UK crowdfunding site. We have long felt there is a compelling case for innovation to support a greater proportion of the population to take part. The Fund, launched in 2011 in partnership with the Office for Civil Society, supported projects that aim to get many more people involved in giving time, money, skills and resources to the causes they care about.

Since the original support, we have seen the creation and expansion of crowdfunding in the UK with three principle market sectors: Equity, Debt and Rewards based.

Financial approach

We used a convertible grant combined with equity crowd investment and stage-gated funding. We were unsure of the longer-term viability of the financial model at the time of the initial investment (as with many of the Innovation in Giving Fund awardees), so a convertible grant was deemed the most appropriate instrument as it balanced the risk of failure with the ability to gain from profitability and to influence Crowdfunder's development in the social good sector through taking a future board role.

Crowdfunder is positioned in the rewards-based sector of the crowdfunding market and, working with Nesta, expanded into innovative models such as community shares offers and matched crowdfunding. Crowdfunder has developed a platform which offers anybody the opportunity to grant/reward fund a project, charity or social enterprise. As a rewards and 'community shares'based platform it does not guarantee financial return to donors or require regulation (although this latter point is being monitored).

Nesta's investment consists of £319,660 in total:

- 2012: £149,660 was derived from a Cabinet Office convertible grant funding as part of Innovation in Giving. This sum was converted to equity and the Cabinet Office handed over ownership of the equity to Nesta, although any financial returns that flow from this part of the investment must be used to support projects which align with the original aims of the Innovation in Giving fund.
- 2014: The second £150k was a Programme Related Investment by Nesta (PRI – charity speak for a direct investment by a charity that might make a financial return but is solidly aligned to the charity's objects) and was invested along with the crowd-shareholders using the Crowdcube equity investment platform in May 2014.
- 2017: We invested a further £20k in December 2017, as part of a £1.1 million crowdraise on Crowdcube. There was an intervening crowdraise in November 2015 which we did not invest in. In total, Crowdfunder has raised around £3 million of equity and loan investments.

Outcomes

Initially, the grant provided flexibility for the company to focus on what was important for delivering the reward-crowdfunding platform, compared to a loan or equity investment.

Crowdfunder has grown year-on-year in terms of revenues, money raised by projects and the number of projects themselves taking a stake rather than making a grant in the business. Nesta takes an ongoing role through a board seat which enables sharper focus on social innovations - such as pioneering match crowdfunding and setting up a community shares offer.

Code Club

<u>Code Club</u> is a network of free, volunteer-led, after-school coding clubs for children aged nine to 11. Code Club volunteers go to their local primary school and spend an hour every week teaching children to code through games and project-based learning.

Demand for coding skills has grown phenomenally in the last ten years, with schools, parents, corporate partners and children all wanting to ensure children are equipped with coding skills for the future. Despite this high demand, Britain's schools were lacking provision for children to learn these digital making skills. Code Club believes that learning code has the benefits of teaching multipurpose skills such as logical thinking, problemsolving, planning and design. This aligns well with Nesta's view, so we campaigned for coding to be added to the curriculum and have backed numerous projects teaching children future skills including digital skills as well as problem-solving, collaboration and resilience.

Rather than managing or setting up each club directly, Code Club facilitates the network of clubs to develop. Its primary role is to make it easy for a volunteer to establish a club nearby. This approach can make scaling unpredictable.

Financial approach

In March 2014, Code Club was awarded £384,000 (including £50,000 for evaluation) to significantly scale up the volunteer-led part of the network. Following a successful start, in November 2014 we awarded Code Club a further £475,000 (including a further £33,870 for evaluation) to accelerate its growth. Both awards were made through the Centre for Social Action Innovation Fund (CSAIF), a £14 million partnership with the Cabinet Office which ran between April 2013 and March 2016.

The grant was used to help ready the central Code Club team for growth. This included expanding their team by hiring regional staff to recruit volunteers and set up clubs, as well as increasing central organisational capacity for training, product development, communications and fundraising. In total, the staff team grew from eight to 30.

We also focused on gathering evidence of impact, knowing more parents and schools would request Code Clubs to be set up if they could demonstrate the impact on children's learning outcomes. We helped the team design a robust evaluation and choose an evaluator, and funded a Randomised Control Trial to test and demonstrate the impact (available to view as a PDF here).

As well as financial support, Nesta offered 'high touch' support from programme managers with experience in service design, organisational growth and marketing to help the organisation's leader to navigate the growing pains of increasing in size rapidly.

Outcomes

With the support of Nesta and others, Code Club grew rapidly. Over two years they succeeded in growing from 1,108 clubs in 2014 to 5,000 clubs in June 2016. Large growth was also seen in the number of young people supported, increasing from 24,000 in 2014 to 127,000 in 2016. Sixty-four per cent of young people attending the clubs had no coding experience before joining. Code Club has since been able to reach an international audience with clubs operating in over 100 countries, and club projects being translated into 28 languages.

In 2015, Code Club partnered with the <u>Raspberry</u> <u>Pi Foundation</u>, connecting them to a product which is at the heart of hobby coding. This partnership allows for further growth within the field of digital making and preparing more young people for life and work in a digital world.

The Longitude Prize

We want innovators to reduce the lethal rise of drug resistant infections. Our flagship £10 million global challenge, the Longitude Prize, is developing new point-of-care diagnostic tests that can quickly, affordably and accurately tell people whether or not they need to take antibiotics. By reducing the amount of antibiotics taken for infections that do not require them, these diagnostic tests will help slow the tide of antibiotic resistance.

Funded by Innovate UK and Nesta, the Longitude Prize was launched in 2014. The topic of the prize was chosen by a public vote featured on the BBC *Horizon* programme. The prize is supported by BIRAC (an Indian state enterprise), Amazon, BBC, Marks & Clerk and the Science Museum, London. The prize has also been part of an international public engagement campaign to raise awareness of antibiotic misuse, including public events, news articles and even a mobile game called *Superbugs*.

Financial approach

Radical change is needed to address the global problem of growing anti-microbial resistance, to ensure a healthcare system that can sustainably control and treat infections. In the spirit of the original Longitude Prize of 1714, where the issue of measuring longitude was solved by a carpenter and watchmaker called John Harrison, a prize approach is being used to open up this challenge to as broad an audience as possible. A prize is an appropriate response to the problem of antimicrobial resistance for a number of reasons: it is challenging a market failure where existing players have not delivered the innovation needed to solve the problem; as a public, open and competitive process it is also helping to raise the profile of the problem, and with it, awareness of the risks of antibiotic misuse.

The first team to produce a test that fulfils the prize will win. Running alongside the Longitude Prize are the Discovery Awards, which are rounds of seed grants for teams developing new diagnostic tests to win the prize, sponsored by MSD, GSK and BIRAC. These help support teams to participate in the prize who might otherwise not be able to. This ensures that the broadest possible cohort of innovators with promising approaches to the problem will be able to compete, and makes it more likely that the problem will be solved and the prize will be won. This is particularly true of the awards supported by BIRAC, which focuses on teams located in India.

Outcomes

So far, 29 promising teams have been supported with grants of up to £25,000. Currently we are working with and supporting our competing teams with more opportunities to collaborate within our teams' page, a new funding opportunities platform, and we endeavour to help them out along their journey towards the prize.

What's next?

Competitors have up to five years to find a solution to the Longitude Prize, with regular submission deadlines. After these deadlines entries will be reviewed and potential winning solutions will be put forward to the Longitude Committee based on the recommendations from the Longitude Prize Advisory Panel.

Matched crowdfunding

Arts and Heritage Matched Crowdfunding Pilot

The Arts and Heritage Matched Crowdfunding Pilot combines crowdfunding and institutional funding to get great ideas off the ground

Matched crowdfunding has emerged as a way of combining institutional funds with community donations - encouraging demand-led projects. This is an approach Nesta has encouraged through setting up test funds with Community First and Crowdfunder. The efficacy of this has become better understood, encouraged by Nesta,

Over £1 million of matched funding was made available for crowdfunded projects in 2016, with horizon scanning of platforms showing that figure will rise substantially in 2018. Despite this growth, there is little evidence of the financial and non-financial impacts of matched crowdfunding. The lack of evidence and insight on impact has held back largerscale funders from trying out matched crowdfunding. Nesta worked to improve this evidence base by working with our partners; Arts Council England and Heritage Lottery Fund to provide £251,500 in matched funding for crowdfunded projects. These funds were used to test which models are best suited to fund arts and heritage projects, and to help create evidence and confidence that would open up this new way of funding projects and working with the public on identifying and supporting projects.

Financial approach

The funding was distributed randomly through two different methods – top up and bridge funding in order to ascertain whether the manner in which match funding was distributed made a difference to the fundraising dynamics. For example, did those that receive top-up funding typically have more donors, or not?

Secondly, the amount of match funding was switched halfway through the programme. The match funding was originally set at 25 per cent of the project total, but was raised to 50 per cent halfway through the pilot.

The random application of matches, paired with surveys of backers and fundraisers enabled us to collect evidence and insight on the impact of the different types of matched crowdfunding. In particular it helped demonstrate one of the main assumptions regarding matched crowdfunding – that it helps reach both new fundraisers and engages new audiences.

The pilot attracted projects beyond the usual pool of grant applicants: 42 per cent of successful project owners had never applied for funding from either Arts Council England or Heritage Lottery Fund before the pilot, indicating that the pilot was to some extent able to reach new projects, organisations and individuals in comparison to more traditional grant funds.

Outcomes

Highlights from the evaluation of the pilot include:

- Matched crowdfunding can help leverage additional funds. The £251,500 in match funding provided by Arts Council England and Heritage Lottery Fund as part of the pilot helped leverage an additional £405,941 from the crowd of 4,970 backers.
- The pilot largely attracted new supporters and finance for arts and heritage organisations, rather than drawing from existing philanthropic sources.
- Matched crowdfunding goes beyond increasing financial contributions. Eight-five per cent of fundraisers reported receiving non-financial contributions such as voluntary work offers and campaign design advice.
- Crowdfunding improves skill levels for individuals and organisations: more than two in three fundraisers reported that running the crowdfunding campaign significantly improved their pitching and fundraising skills.
- While crowdfunding can help fundraisers easily attract a global audience, in the majority of cases backers live less than 20 miles from the project they supported and the majority stated that they were going to see or experience the project in person.
- While matched crowdfunding attracts a diverse mix of backers in terms of age, education and average income, it risks being dominated by a few large donors, with the top 1 per cent of backers giving 24 per cent of the total crowd contribution.

Arts Impact Fund

The Arts Impact Fund (AIF) is a £7 million pilot impact investment fund providing unsecured loans to arts and culture organisations in England

There is little public funding available for arts and cultural organisations; there is also more competition for limited philanthropic funding. Arts and Cultural organisations need to become more sustainable and less reliant on grants. Income stream diversification is one way that arts organisations can become more financially resilient, which in turn gives them more flexibility and capability to achieve their social and artistic objectives.

Our hypothesis was that many arts organisations lend themselves to multiple revenue streams (e.g. ticket sales, merchandise, intellectual property) and sustainable business models – so should in theory be able to repay investment. If this hypothesis is validated, we would demonstrate that repayable finance that takes into account the social impact of the arts is appropriate and practical for the sector. And we would infer that it is practical and/ or desirable to scale this approach.

Financial approach

AIF was designed to provide unsecured (risk) finance, of £150k-£600k, repayable over three to five years. In other words, unsecured loans and revenue participation investments (sometimes called quasi-equity). It was not designed to make equity investments because most of our target beneficiaries would be asset-locked entities that did not have share capital (hence our appetite for quasi-equity).

Mainstream banks are unlikely to lend because of perceived risk, whilst art organisations cannot take on equity investment due to their assetlocked legal structures (i.e. companies limited by guarantee, charities) resulting in them being unable to raise performance-related, risk-finance (equity) that more commercial organisations in the creative industries can.

AIF prioritises sustainable business models over financial return, with loans kept affordable (i.e. the interest rate was slightly below market rate). The cost of finance was not considered to be integral to testing the fundamental proposition, instead the aim is to test if there is demand for finance and business models suited to repaying it.

Outcomes

We successfully deployed £7 million of finance to over 20 organisations, allowing them to expand activities, acquire new assets and test out new business models. We have demonstrated that there is demand for this sort of finance - driven largely by word of mouth.

We have set clear impact output and outcomes goals for our investees in terms of the social benefit we expect them to make over their investment period. This has been an opportunity to increase the standard of impact evidence in the sector.

What next?

AIF has only made unsecured loans, because there were few appropriate opportunities for revenue participation investments in the sector. We need a wider range of financial products available for arts and culture organisations – e.g. smaller-scale loans, finance repayable over a longer period, more experimentation with performance-related investment. Following the completion of the AIF pilot, we aim to scale up our work to offer longerterm impact investment to the arts and cultural sector.

Innovate to Save

Innovate to Save was developed to support new ideas that have the potential to generate cashable savings and improved delivery for Welsh public services, whilst tackling some of Wales' most complex public service issues.

Financial approach

The model used by Innovate to Save is new – blending different kinds of finance and intensive support to achieve cashable savings. Through grant funding, non-financial support and repayable loans, the £5 million programme will support public and third sector organisations to prototype, trial, scale and evaluate innovative projects.

Through the programme, we are exploring the drivers of (and barriers to) innovation when thinking about how we deliver better services for less.

The Welsh Government's Invest to Save Fund (£174 million towards projects) runs as a loan scheme,

offering unsecured, interest free finance to public sector projects that require upfront investment. Challenges have included a lack of non-financial support, effective evaluation and little incentive for partnership projects. Innovate to Save was designed to address these challenges.

Outcomes

There are three phases to the Innovate to Save programme: pre-application support to develop ideas into robust projects; research and development prototyping and testing new ideas; and implementation, where ideas that show the capacity to improve services and generate savings will be rolled out.

It is too early to discuss firm outcomes since we are still delivering Innovate to Save, however, a second improved version of the programme has been approved, launched in May 2018.



Innovate to Save

Third Space Learning

Nesta Impact Investments (NII) made a £1.75 million investment in Third Space Learning, a provider of one-on-one maths tuition online. The business currently sells into UK primary schools and enables children who are falling behind to catch up.

Low numeracy is a strong predictor for long-term deprivation and is linked to unemployment as well as problems in work and home life. Children that fall behind in numeracy early on experience more difficulty in making up the attainment gap, hence early intervention is needed. However, there is a global shortage of maths specialists, making it a hard cycle to break.

Financial approach

Nesta invested £500k as part of a £1 million round in 2015 (equity), £500k in 2016 (convertible loan note) as part of a £1 million round, and £750k in 2017 as part of a £4.6 million round.

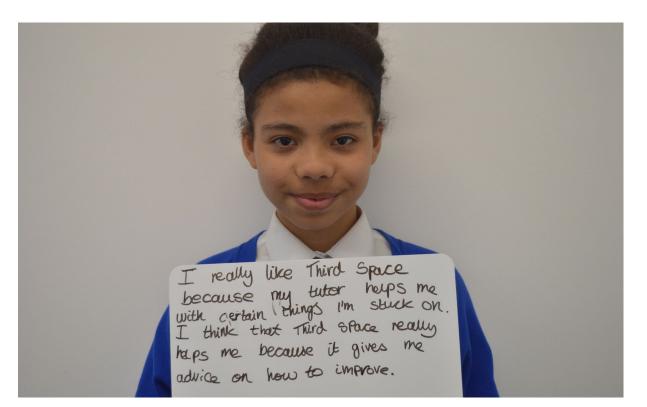
We structured the investment predominantly as equity, in order to achieve a return commensurate

with the risk of investing in an early-stage business. Structuring part of the investment as a convertible loan note helped avoid protracted negotiations on valuation.

Outcomes

Third Space Learning's technology facilitates and records thousands of hours of teaching every week. The funding is enabling the business to use this data to develop a model to augment the ability of its teacher community and scale more efficiently. The investment has also allowed TSL to grow the number of schools buying from them from just over 2,000 when we first invested, to 6,000 currently. The business has also expanded into secondary schools and selling directly to end users.

After our initial investment, the business was able to raise a total of £5.6 million equity to further accelerate their growth. They have attracted UCL Technology Fund and Downing as shareholders.



Third Space Learning

Oomph!

We made £566k of investment into Oomph!, which stands for Our Organisation Makes People Happy. The business provides exercise and activity training to the residential care industry and community organisations. They have recently launched a fully managed excursions service to residential care homes.

The residential care sector is struggling to deliver good quality care and is under extreme pressure through local authority budget cuts and rising costs. In 2015 the Health Quality Commission warned that 40 per cent of care homes for the elderly are below standard. Exercise and activity in care homes is often limited and of poor quality.

Financial approach

Nesta invested £200k in the form of equity in 2013 in order to fund a scale up of exercise and activity training and the business pivoting to a more scalable business model. We later invested £56k, alongside the founder of Barchester Healthcare, to fund a trial of the excursions business, and in 2017 invested £310k alongside The Care and Wellbeing Fund to fund the rollout. We structured the investment as equity, in order to achieve a return commensurate with the risk of investing in an early-stage business.

Outcomes

Our initial funding enabled the business to move away from providing exercise and activity classes directly to care home residents, to training residential care home staff to provide classes and activities themselves. This has facilitated scale. The business was subsequently able to attract the founder of Barchester Healthcare as Chairman, raise funding to trial its excursions business and attract significant investment from The Care and Wellbeing Fund alongside Nesta. The business grew from facilitating approximately 35,000 sessions p.a. when we first invested, to more than one million sessions in the year to end March 2017, and excursions for 1,260 individuals in the quarter to end of December 2017.

After our initial investment, the business was able to raise a total of £1.8 million equity to further accelerate their growth. A lot of Oomph's strength lies in its enviable relationships with over 50 care home groups.



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Oomph!
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Reconnections (Social impact bond)

Reconnections is a service throughout Worcestershire helping to reduce social isolation and end loneliness for those in later life by creating personal connections with volunteers. Loneliness and isolation is widespread, and feeling lonely produces poorer health outcomes including depression and dementia whilst increasing reliance on GPs, residential care and hospital services such as A&E.

Financial approach

A social impact bond was used to finance the service. Investment from social investors, including Nesta Impact Investments, provided the upfront investment capital to run the service. The local authority, CCG and Lottery then make payments based on reductions in loneliness. The reduction is measured using the UCLA Loneliness Scale.

Outcomes

The bond enabled an innovative service to reduce loneliness to be rolled out countywide. The service has matched 1,000 people with volunteers, with 620 people completing the programme. As well as contributing to reducing loneliness, the service has developed effective approaches to volunteer recruitment and management.

What next?

Due to the results-based contract, the service relied on a real understanding of service users and their levels of loneliness. However, we've found that only using one performance metric for performance management has been too narrow an approach. Instead we would recommend a basket of performance indicators.

This was an experimental service that had not been delivered at scale before, and so in hindsight it was not appropriate for investment capital with a return expectation. There were an enormous number of risks on the investor side, from understanding the real costs of operations to not having a complete understanding of the benefit (thus when cost base had to change it was not easy to negotiate increased costs). However, the financial upside was capped, which led to an asymmetry of risk and return.



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Reconnections
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