

Experimental

STORIES FROM THE INNOVATION GROWTH LAB

BALANCING THE SCALES

Crowdfunding sees ideas not gender



04

HIDDEN INNOVATORS

Why giving everyone a chance to innovate still leads to good ideas

10

APPLYING METHOD TO THE MADNESS

Why science has a place in creative startup culture

IGL.

Innovation
Growth Lab
by **nesta**

Glossary

AGILE METHOD:

An approach to project management that encourages iterative development and feedback, allowing projects to change course as needed and produce working results.

CONTROL GROUP:

The group of people in a study who do not receive the intervention which is being studied. Their results provide a baseline of behaviour and a comparison point for when the intervention is applied.

DESIGN THINKING:

Design thinking is 'human-centred' approach to solve problems creatively. It encourages organisations to focus on the people they're creating for rather coming to a problem with a fixed destination in mind.

EQUITY CROWDFUNDING:

Crowdfunding is a method of financing projects and businesses through many small donations from a large group of people, who, in return for their investment receive shares in the company. The funding process is usually facilitated by dedicated websites or online platforms.

EVIDENCE-BASED POLICY:

Evidence-based policymaking (or EBPM) rose to prominence in the Blairite years and is synonymous with drawing on research-based evidence to inform policymakers about "what works" and thereby produce better policy outcomes.

EXPERIMENTAL POLICYMAKING:

Experimental policymaking is an approach to designing and implementing new policies by starting at a small scale, testing solutions early through rigorous methods and only scaling up those ideas that work. It also involves spending more time trying to understand what the challenge is about, and being open to make continuous improvements to the solutions implemented.

INNOVATION AND GROWTH POLICY:

Innovation and growth policy lies at the heart of how governments and societies shape progress through innovation and technology. At their simplest, these are the set of policies designed to create economic growth and support innovation in the economy.

INTERVENTION GROUP:

The group in a study that receives the intervention being tested. Also called 'treatment group' or 'experimental group'.

OPT-IN/OPT-OUT:

A process used by researchers to recruit study samples. 'Opt-in' samples refer to those who volunteer to take part and 'opt-out' samples are those who are approached to take part and excluded only when they indicate.

OUTCOMES:

The impact that a test, treatment, policy, programme or other intervention has on a person, group or population.

RANDOMISED CONTROLLED TRIAL (RCT):

An experiment in which participants are randomly assigned to intervention and control groups. This allows for a cleaner comparison between statistically equal groups - helping to minimise bias.

Introduction

The Innovation Growth Lab (IGL) is a global hub based at Nesta where we design, test and promote evidence-based approaches to innovation, entrepreneurship and growth.

- We are a partnership of governments, foundations and researchers working to advance experimentation.
- ▲ We support trials, generating more evidence through research.
- We build communities and networks, host an annual conference and smaller events throughout the year.
- ✦ We foster new ideas and resources to inspire others working in this field.

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Our impact



Hidden innovators

WHY GIVING EVERYONE A CHANCE TO INNOVATE LEADS TO GOOD IDEAS

The now famous study by Raj Chetty *et al.* looking at who becomes an inventor in America was pivotal in showing how wealth and opportunity acts as a filter to innovative ideas, making it far more difficult for those born without the same opportunities to become inventors. But how do these types of barriers present later down the line, and is there a way to encourage more people to come forward with ideas even if they don't consider themselves "innovators"?

It's a question, that if answered, we could all stand to benefit from — not least businesses who very often rely on innovative ideas for business development and growth. In fact, many of the features many of us now use to communicate everyday (Google Mail, Google AdSense, Facebook's 'Like' button) were conceived by employees who took the initiative, hands-on responsibility, and who figured out how to turn an idea into reality.

barrier to entry aka having people 'opt-out'. This shows it's not only people who volunteer to participate in innovation contests that have good ideas.

Conversely, Rigtering and Weitzel found that giving people a steer with creative inspiration - sharing past winning ideas for example - actually decreased the level of creativity and resulted in fewer sign-ups.

APPLYING THIS LESSON MORE WIDELY

If the lessons from Rigtering and Weitzel hold true more generally, many organisations may be missing out on valuable ideas by simply not making such opportunities more freely available.

“*If the lessons from Rigtering and Weitzel hold true more generally, many organisations may be missing out on valuable ideas by simply not making such opportunities more freely available.***”**

Moreover, we might ask whether we are missing out on many breakthrough ideas by not encouraging more people to innovate, regardless of whether people naturally consider themselves innovators or creative. ●

ENCOURAGING MORE PEOPLE TO THROW THEIR NAME INTO THE RING

Entrepreneurship within organisations, and how best to encourage it, was what inspired members of the IGL Research Network, Rigtering and Weitzel, to design an experiment testing different ways to recruit employees to an Innovation Competition that asked them to come up with new ideas for the company.

Teams of employees were randomly assigned to receive different types of prompts along with their invitation to the Innovation Competition. Some were told they could sign up to participate, others were automatically entered into the challenge unless they opted out, and some were provided with different information about the type of innovations that were successful in the past.

A SURPRISING RESULT

The results from this RCT showed that while the *quantity* of ideas increased, the *quality* of the ideas remained unaffected. So it was possible to encourage more good ideas by lowering the

This story is based on research by Coen Rigtering & Utz Weitzel, Utrecht University School of Economics, funded through the IGL Grants Programme.



Balancing the scales

CROWDFUNDING SEES IDEAS NOT GENDER

It's no secret that female entrepreneurs face more barriers and struggle to access the same opportunities as male entrepreneurs, particularly in financing. But are there funding platforms which do a better job of eliminating this bias or are even skewed in favour of female entrepreneurs?

The rise of more democratic platforms like crowdfunding has disrupted the status quo and revolutionised how entrepreneurs access financing. It's been credited with moving decision-making away from a small pool of experts and ceding power to a broader population of potential investors, fundamentally changing the investor landscape.

Equity crowdfunding goes one step further, allowing private companies to sell securities to the crowd, mimicking the same model as more traditional, and harder-to-access finance models like angel investment and venture capital.

But whereas we know gender bias has left a watermark on the world of equity financing, with many women struggling to access the same opportunities as their male counterparts, the same question hasn't been asked of equity crowdfunding. To answer this, researchers, Bapna and Burch, set up an RCT to test whether knowing the gender of a founder affected a potential investor's interest, and ultimately, their decision to fund the venture.

SHOWING HOW THE GENDER BIAS PLAYS OUT

In the experiment, they revealed a female co-founder of a new venture to some investors, and a male co-founder of the same venture to other investors (avoiding pictures or other information that could trigger non-gender bias). They found that the founder's gender made little difference on the investors' interest in the venture. Male investors were as likely to be interested in female-led venture as male-led ones. The female investors showed a slight preference for female-led ventures but this was mainly driven by less-experienced investors in the experiment.

WHAT DOES THIS MEAN FOR FEMALE-LED VENTURES

The results from Bapna and Burch's RCT suggest the gender gaps we find in traditional financing may not persist in the equity crowdfunding context. Similarly, barriers typically faced by female entrepreneurs seeking funding, for example difficulty navigating financial networks, structural barriers such as pitching and a gender bias against women do not exist - at least not to the same extent - in equity crowdfunding.

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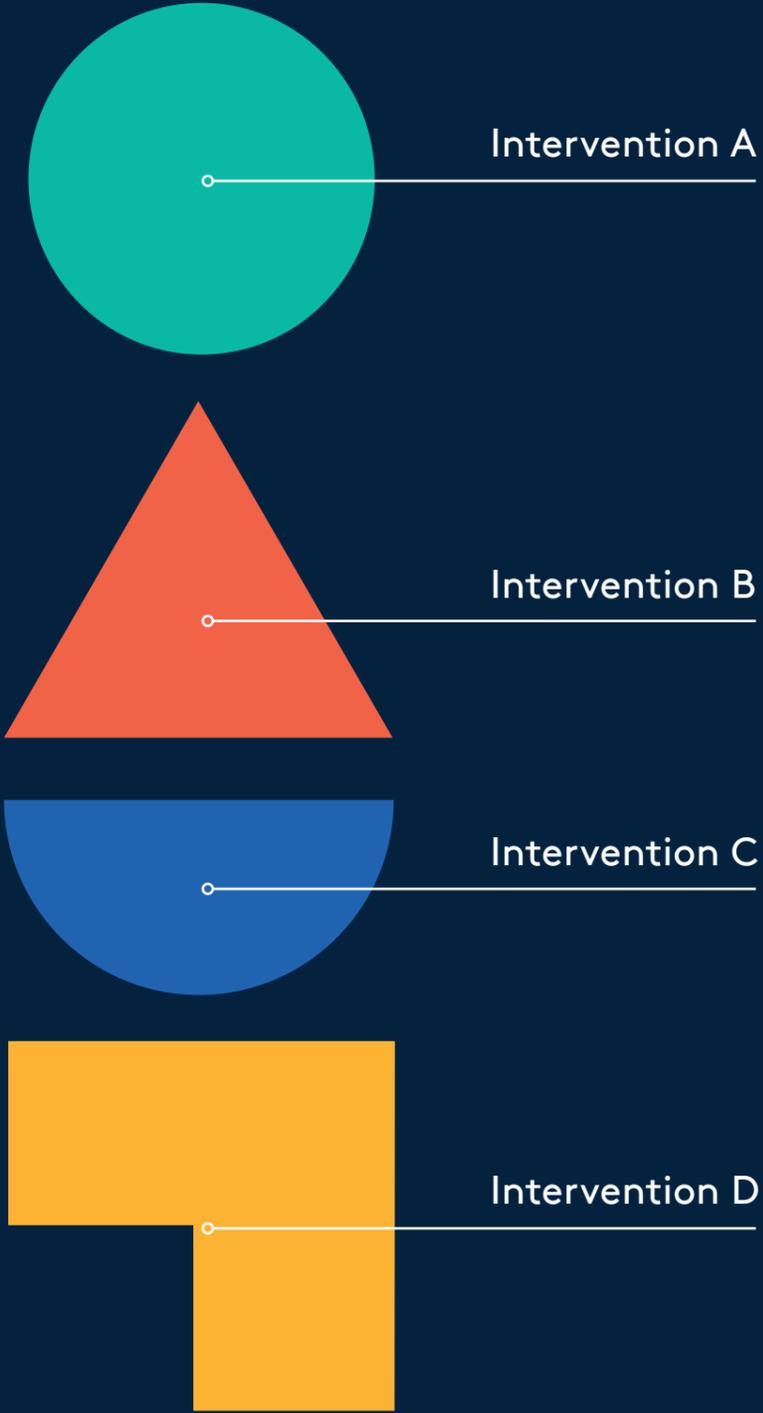
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This has important implications for female entrepreneurs who traditionally face discrimination. While much remains to be remedied in equaling access to funding, this at least could be heralded as good news. ▴

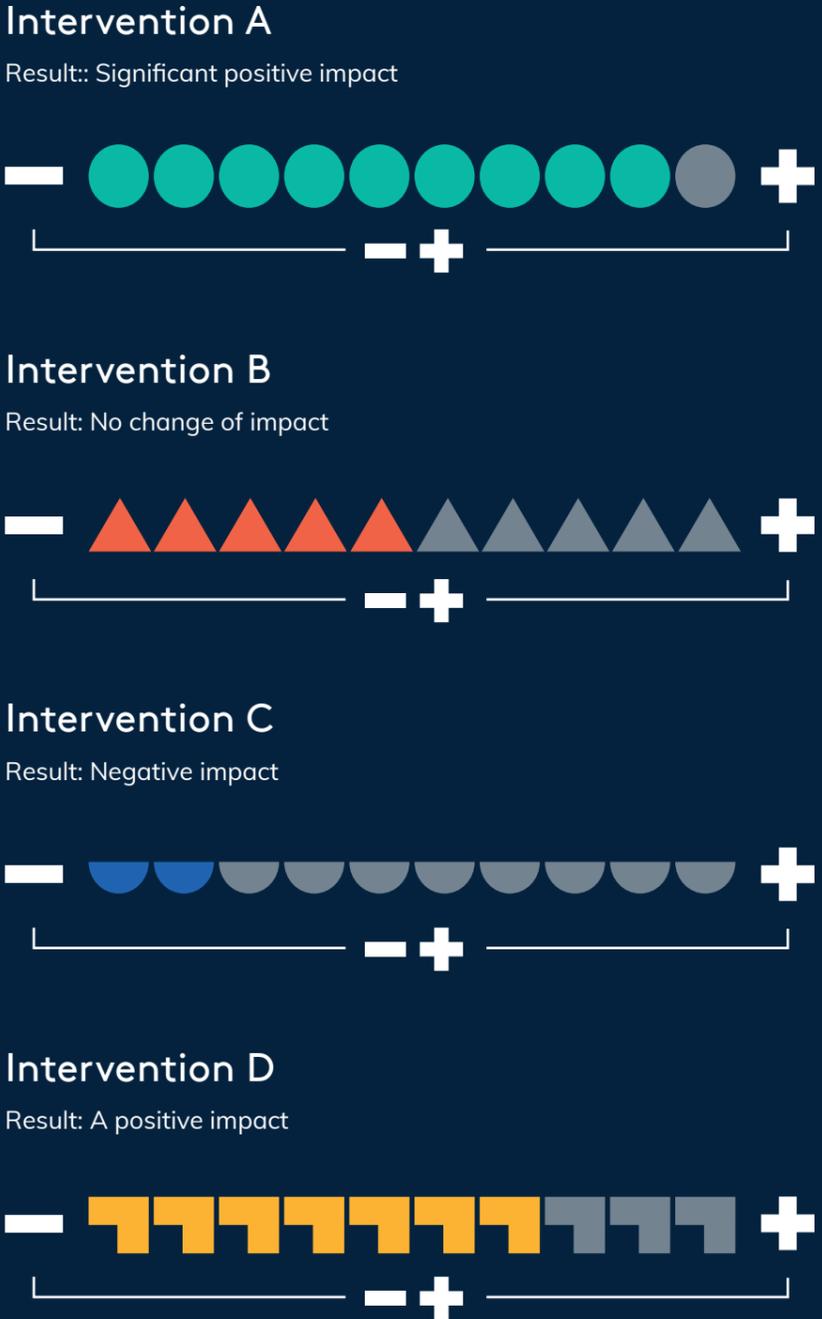
This story is based on research by Sofia Bapna and Gordon Burch, University of Minnesota & University of Wisconsin-Madison, funded through the IGL Grants Programme.

What is a policy experiment?

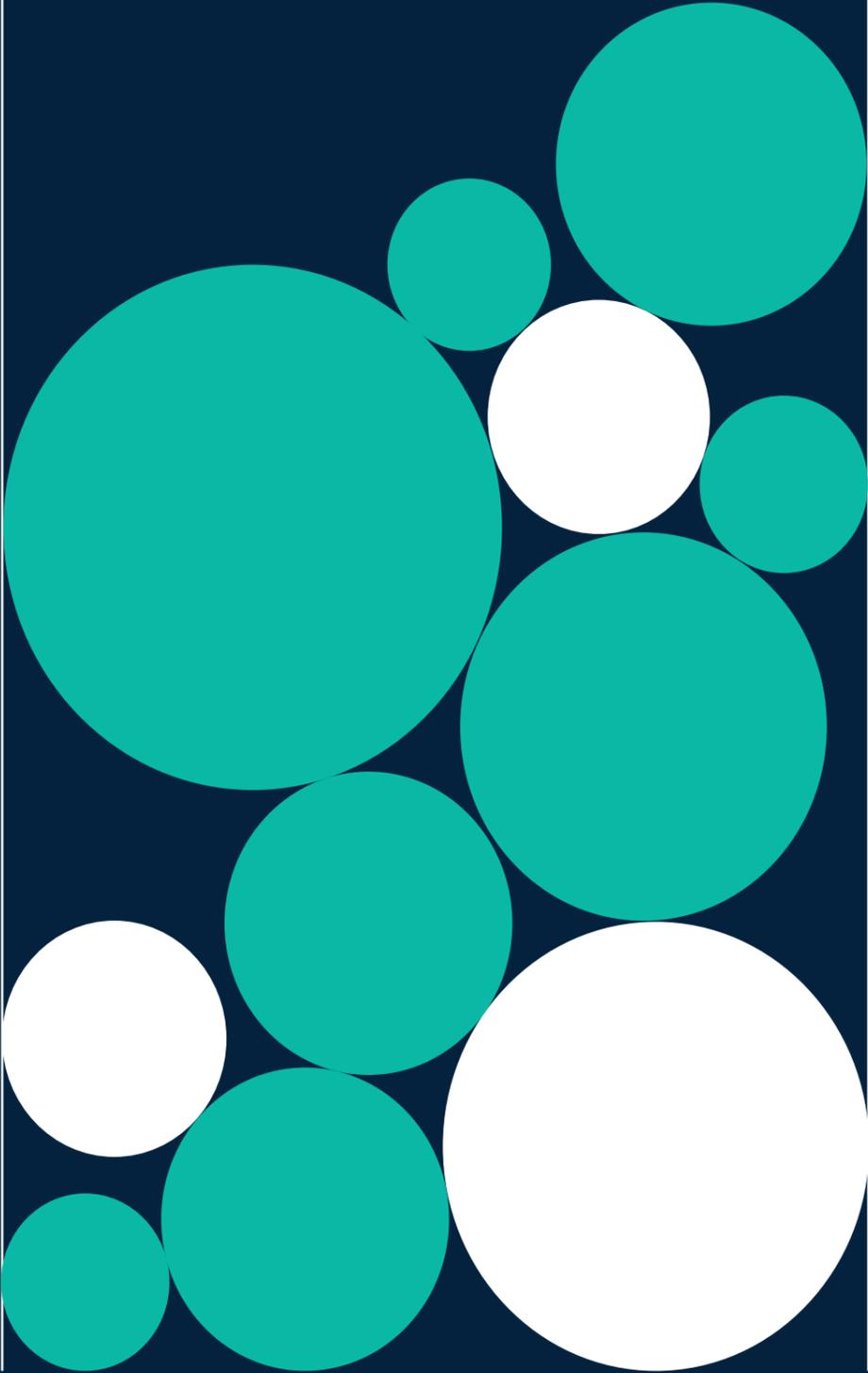
Step 1: Trial different interventions



Step 2: Evaluate their impact



Step 3: Scale-up what works best



Applying method to the madness

WHY SCIENCE HAS A PLACE IN CREATIVE STARTUP CULTURE

The rise of the scientific method — where a scientist observes the world, develops explanatory ideas and then puts them to the test — has gifted us with understanding and technology that has shaped modern culture. It's an approach which has also bled into the business world, where increasingly, businesses are realising the benefits of experimentation.

Nowadays it's common to find, particularly in modern workplaces, a culture that allows staff the latitude to experiment. Buzzwords like 'design thinking', 'agile methodology' or using discovery-driven planning are commonplace. Yet, despite this growing awareness and menu of choices, there is limited scientific understanding of what is the best experimental approach.

A PROMISING START

Applying the rigour of a science experiment to the creative and stereotypically unstable culture of a startup may seem an odd choice. However, it's a situation Italian researchers from Bocconi University sought to test when they set up an experiment to see whether applying a more scientific method would have a positive impact on a startup's overall performance.

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The study found that those who applied the scientific method received more than double the amount of expressions of interest from customers than the control group.

In 2016, the researchers conducted a RCT involving 116 Italian entrepreneurs divided into a treatment and control

group. While both groups received general training on business experimentation, the treatment startups were taught to formulate and test hypotheses like scientists do in research.

The study found that those who applied the scientific method received more than double the amount of expressions of interest from customers than the control group.

The reasons given by researchers were that entrepreneurs and startups who received the training were more precise with their projections of returns, which allowed them to abandon unprofitable projects earlier. It also made them more capable of improving their products or business models.

FROM MORE PROFITABLE BUSINESS TO BETTER POLICY

Spreading the adoption of the scientific approach from startups to established firms, or even to policymakers has the potential for significant economic implications.

Gambardella and his team are currently working on a larger version of this trial which will investigate the impact of introducing the scientific method to startups on their revenue and survival. Look out for findings from this study later this year. ■

This story is based on research by Alfonso Gambardella, Arnaldo Camuffo, Alessandro Cordova & Chiara Spina, Bocconi University. Their larger follow-up trial is funded through the IGL Grants Programme.



Background

Successful businesses experiment all the time: iterating and tweaking new ideas until they know that they deliver maximum value and efficiency. But governments have been slower to take up this approach.

Very often, policymakers face challenges without clear solutions — under pressure to act they will choose an existing approach, usually with one design and the hope that it will work.

The Innovation Growth Lab at Nesta, along with a growing chorus of voices, has long advocated an experimental approach to policymaking.

So why do we need more experimental policy? Every year governments around the world spend billions to support entrepreneurs and businesses to innovate and grow. Across Europe, we spend €150 billion, but because of a lack of experimentation we don't know what elements of this spend work and which don't.

The IGL is helping to shift this approach, by testing assumptions, uncovering new insights, developing new approaches and validating impacts. Through our work with national, regional and local governments, as well as foundations and international organisations, it is having a global impact on the way we support innovation in the economy.

About IGL

We believe that a more experimental approach to innovation and growth policy is needed - that asking "what could work" is an important step to knowing what works, and therefore what could be more effective.

Our team supports governments through expertise and experience to shape their innovation and business policies. We work with policymakers to identify policy options, test a range of policy ideas, and quickly learn what has the most impact.

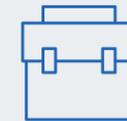
OUR WORK FOCUSES ON THREE MAIN AREAS:



INCREASING INNOVATION



SUPPORTING HIGH-GROWTH ENTREPRENEURSHIP



ACCELERATING BUSINESS GROWTH



Our work with policymakers

OUR PARTNERSHIP OFFER INCLUDES:



DESIGNING AND RUNNING TRIALS:

- Scoping trial opportunities and design
- Support during trial implementation
- Support with interpretation of results and advice on how to translate these into practice



NETWORKING AND KNOWLEDGE SHARING OPPORTUNITIES:

- Access to IGL policy network
- Participation in partnership-wide activities and working groups
- Connection with IGL research network
- Free access to IGL events



CAPACITY BUILDING AND RAISING AWARENESS:

- Exploratory and capacity building workshops
- Personalised advisory support
- Tailored webinars



ACCESS TO ROBUST EVIDENCE AND USEFUL TOOLS:

- Access to results of trials and research financed through the IGL Grants programme
- Opportunity to commission flagship trials on topic of particular interest
- Access to experimentation toolkit
- Partners-only tools such as area-specific idea banks to translate these into practice to translate these into practice

Our work with researchers

At IGL we fund trials in innovation, entrepreneurship and business growth to develop new solutions to policy challenges and test them in partnership with other organisations.

We have a research network of over 85 academics working in this field across the globe.

We act as a convener: bringing together researchers, policymakers and governments at events and workshops so that we can learn from each other and further explore potential solutions to the challenges governments are facing.

Annually, we run the IGL Grants Programme, which to date has given £2.4 million to fund randomised controlled trials to find out what

works to increase innovation, support high-growth entrepreneurship and accelerate business growth. We aim to build the evidence base to further understand what works.

20 Entrepreneurship trials

11 Innovation trials

8 Business growth trials

2 Crowdfunding / Investment trials

IGL in numbers

SINCE WE WERE FOUNDED AT NESTA IN 2014, WE HAVE:



Worked with **15 partner** government agencies



Supported **55 trials**



Welcomed over **1,100 attendees** at our conferences and workshops



26 countries with IGL partners or projects



£2.4 million spent through our grants programme



Over **85 researchers** in our network



For more information and to discover how you can work with IGL please get in touch:

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