Some international experiences on building experimental innovation and growth policy

Experimentation in Federal Funding - National Academies - March 2023

Albert Bravo-Biosca
Director, Innovation Growth Lab, Nesta & BSE

The Innovation Growth Lab

IGL is a global non-profit initiative that works to **increase the impact of innovation and growth policy**, by ensuring that it is informed by **new ideas**, increased **experimentation**, and **robust evidence**.

We work at the intersection of **research and policy**, where we help organisations become more **experimental**, test **ideas**, and **learn** from each other.

We have worked with **over 35 government agencies** across 5 continents to help them become more experimental, and have **supported over 70 trials in 28 countries**.
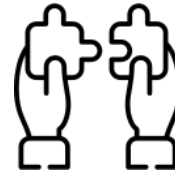
These are the four pillars of our work:

Research   **Policy**   **Community**   **Skills**

A global community for better policy through experimentation

The IGL Partners

Government ministries, innovation agencies and foundations from around the world.

Department for Business, Energy & Industrial Strategy

GOBIERNO DE ESPAÑA · MINISTERIO DE INDUSTRIA, COMERCIO Y TURISMO · enisa

Rijksdienst voor Ondernemend Nederland

FFG Promoting Innovation.

Innovation Norway

London Business Hub

Innovation, Science and Economic Development Canada
Innovation, Sciences et Développement économique Canada

UKRI Innovate UK

EWING MARION KAUFFMAN FOUNDATION

nesta

argidius

The IGL Research Network

Over 100 researchers from around the world working in the fields of innovation, entrepreneurship, productivity and growth.

IGL Scientific Committee

Nick Bloom Stanford Business School | **Dietmar Harhoff** Max Planck Institute for Innovation & Competition | **Karim Lakhani** Harvard Business School | **Josh Lerner** Harvard Business School | **Fiona Murray** MIT Sloan | **Mark Schankerman** LSE | **Scott Stern** MIT Sloan | **John Van Reenen** LSE | **Reinhilde Veugelers** KULeuven | **Heidi Williams** Stanford University

Some of the other organisations we work with

European Commission

WORLD BANK GROUP

IDB

Taftie — The European Network of Innovation Agencies

RoRI RESEARCH ON RESEARCH INSTITUTE

GEN GLOBAL ENTREPRENEURSHIP NETWORK

NASA

What is an experiment?

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Trying something new

Common use

"a **test done in order to learn** something or to discover if something works or is true"

Cambridge English Dictionary

→ **Learning** is the priority; **intentionally** test hypotheses in a **structured** way, and within set **timeframes**
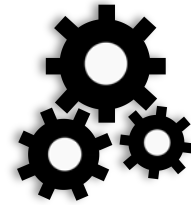
Experimentation is valuable

Novel solutions to policy challenges

De-risk new programmes

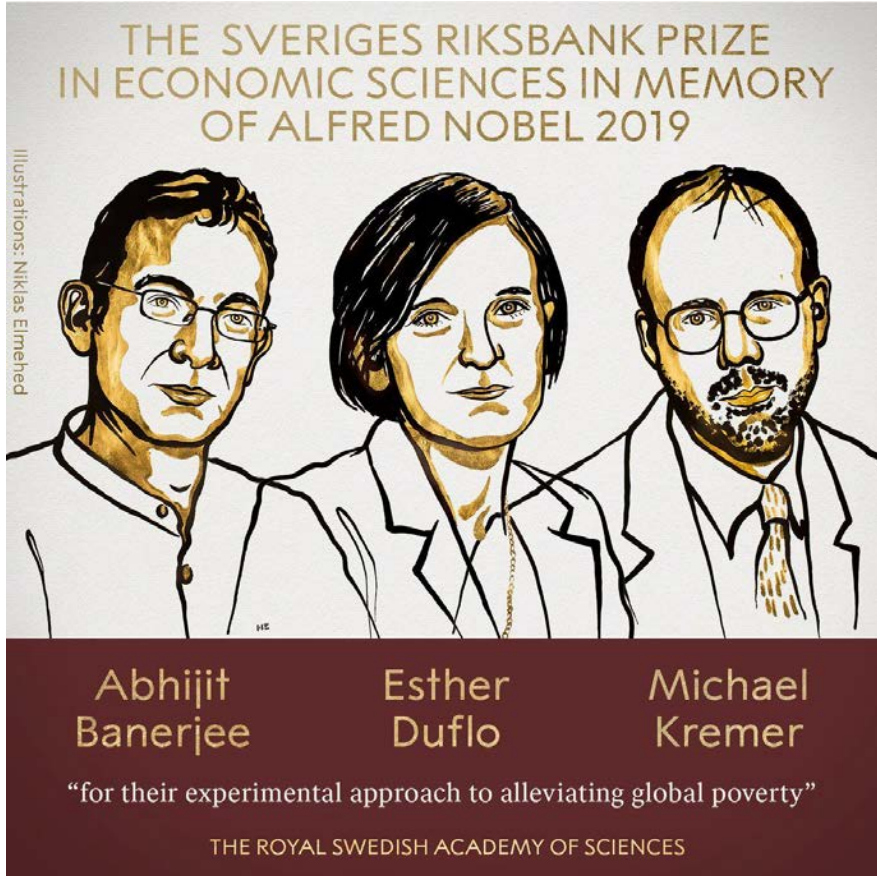**Continuous improvement**

Time-limited unless demonstrated impact

Better evidence & decisions

Save money

More impactful policies & better value-for-money

Becoming more experimental

THE SVERIGES RIKSBANK PRIZE IN ECONOMIC SCIENCES IN MEMORY OF ALFRED NOBEL 2019

Illustrations: Niklas Elmehed

Abhijit Banerjee   Esther Duflo   Michael Kremer

"for their experimental approach to alleviating global poverty"

THE ROYAL SWEDISH ACADEMY OF SCIENCES
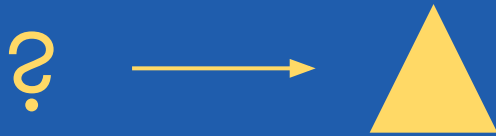
Traditional approach

Launch a large programme without prior small-scale testing, with one design and the hope that it will work
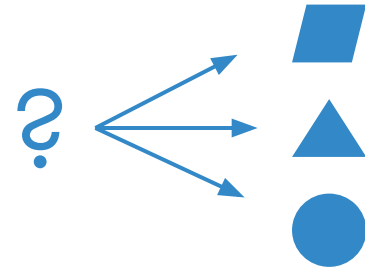
Experimental policy

Start small, trial different designs systematically, learn what works to increase impact and scale it up

Lots of ways to use RCTs...

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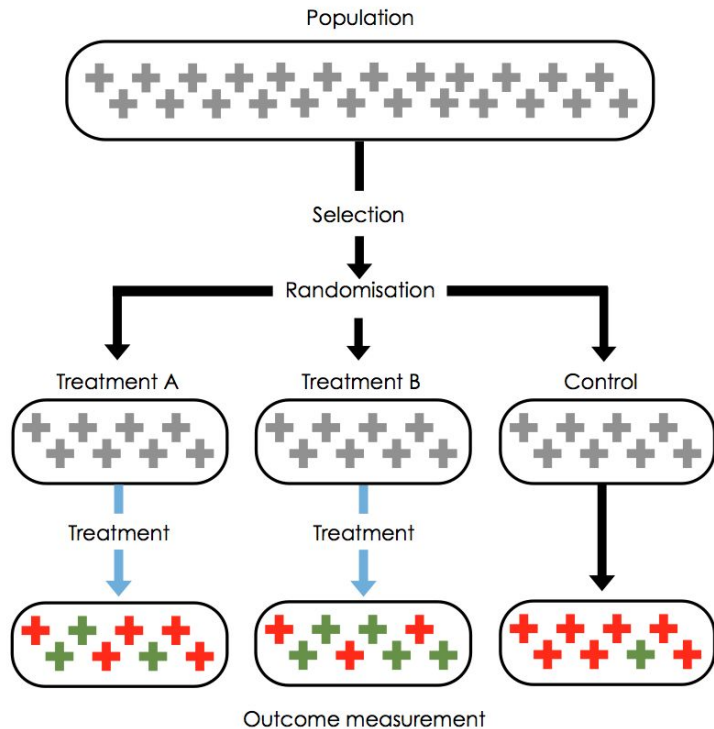
- **Evaluation experiments:** Impact evaluation of new programme or changes in the design of an existing one
- **Optimisation experiments:** Testing small tweaks in implementation process (rapid fire A/B testing)
- **Randomised encouragement designs:** Evaluate the impact of a programme without blocking access for anyone
- **Shadow experiments:** As experiment where the tested variation happens in the shadow of the current approach. For example, running parallel assessment processes but with only one used to inform actual decisions
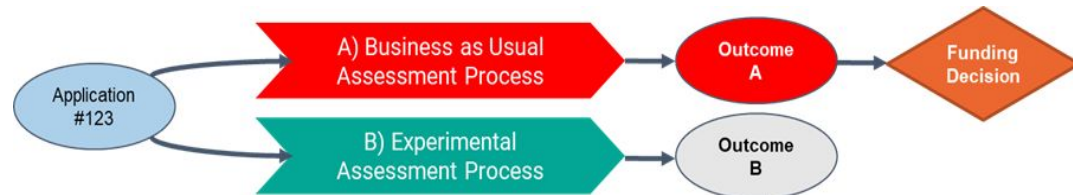
Example: Competitive funding calls

What programme features do recipients value? (marketing trials focused on different features)

How can we get more/better applications, increasing diversity in ideas and backgrounds, and engaging with communities beyond the field (eg nudging trials)

How to support applicants to develop new collaborations and prepare better applications?

How to improve the selection processes? (eg behavioural biases)

Announce and promote funding call → **Support applicants and receive applications** → **Assess proposals and select which to fund** → **Agree terms and finalise agreement** → **Funding drawdown** → **Next phase**

Insufficient applications | Wrong projects selected | Projects/firms delayed or fail

Does providing written feedback adds value? (eg startup chile)

How to meet programme KPIs, such as time-to-grant?

What will be done with applicants turned down?

Is there a need for additional support for funding recipients?

How to increase the commercialisation and/or application of the knowledge produced?

In these circumstances perhaps a lottery could be used to allocate funding, opening the possibility of using this as the basis for an impact evaluation
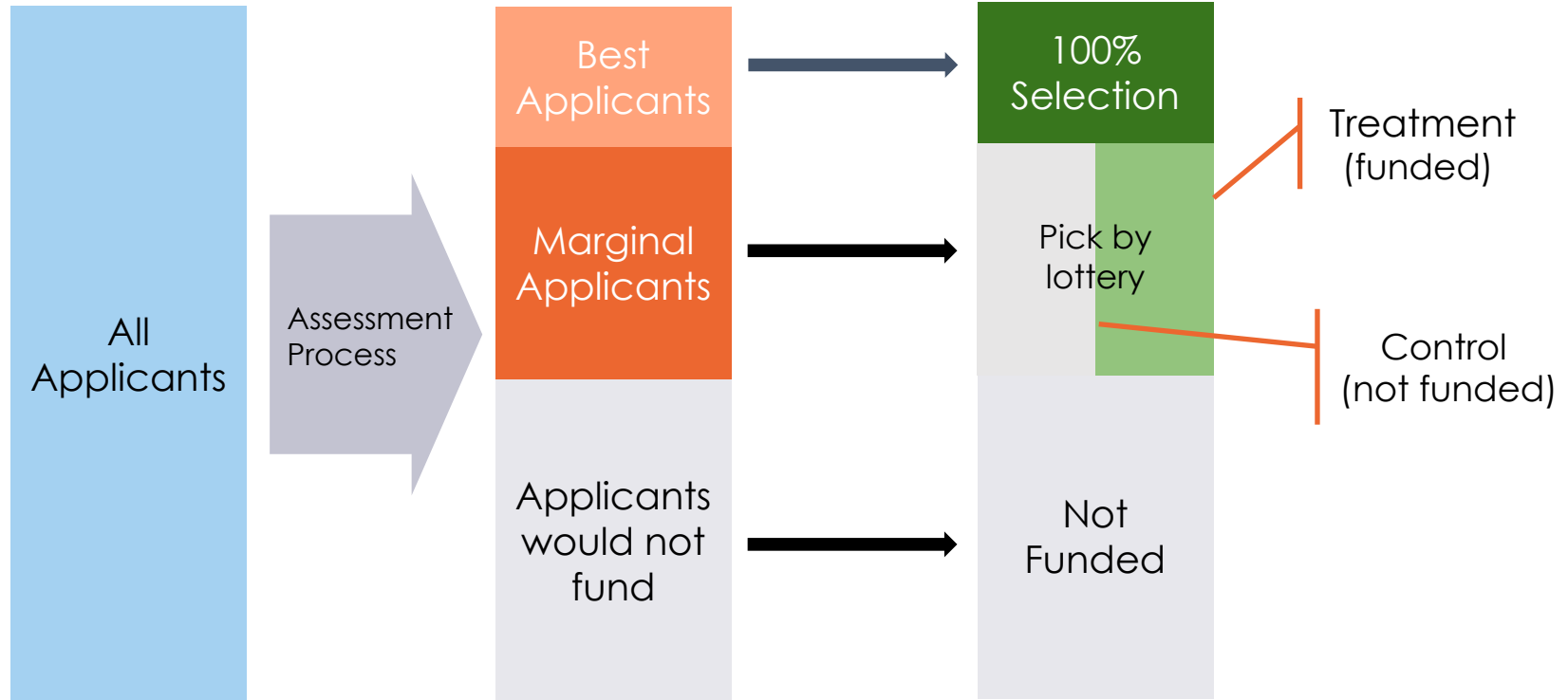
For more inspiration see....
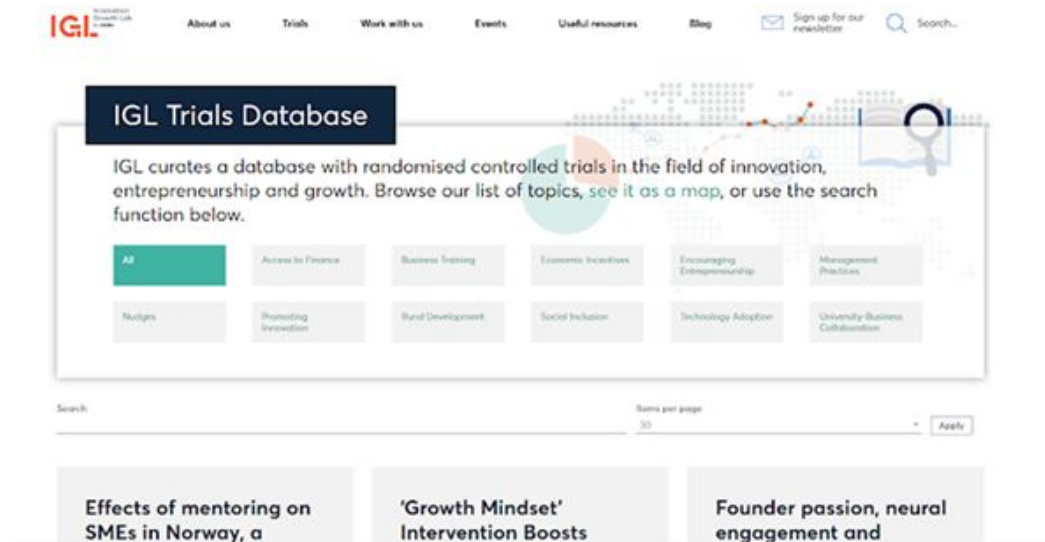
Our online Trials Database providing details of more than 150 RCTs in the field of innovation and growth

Becoming an experimental organisation is a journey

Mindset

"What if?"
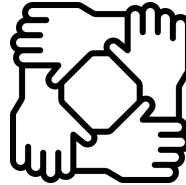
Culture

Organisational flexibility and openness to failure
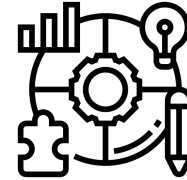
Method

Clear ex-ante learning strategy (RCTs, prototyping, ethnography, mixed methods, etc)

Experimental organisations: Openness vs capabilities

Openness to experiment refers to an agency's willingness to learn, being open about uncertainty and embracing experimental methods and the benefits of randomisation to inform decisions.

Capabilities to experiment refer to specific skills and resources that agencies need to successfully run an experiment. This includes access to data infrastructures, research and evaluation capabilities and RCT expertise.

Categories of innovation agencies according to their maturity to experiment

HIGH

Openness

Over-optimistic experimenters

Emerging experimenters

Established experimental agencies

Intuition-driven organisations

M&E traditionalists

Equipped rejectionists

LOW

LOW — Capabilities — HIGH

Source: Boosting Experimental Innovation Policy in Europe

Example: TAFTIE Experiment! Taskforce

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![Taftie logo — The European Network of Innovation Agencies]

A 2-year taskforce led by IGL & TAFTIE with 17 European innovation agencies on experimentation, providing participants with:

a. **Capacity building** covering the wide range of skills needed to experiment – building on IGL's years-long experience of helping government agencies experiment;

b. **Practical sessions** in ideation, experiment design, and exploitation of results – all focusing on real life challenges faced by participating agencies;

c. Opportunities for **peer learning** – allowing policymakers to exchange ideas and concerns and learn from each other's experiences.

Starting small tends to be more effective

Incentives & signals can be very effective

1) Send a strong signal by **explicitly welcoming RCTs** in existing policies &, funding calls (offering to cover associated costs and/or addressing misconceptions about their eligibility)

2) Setting up **experimentation funds** that identify, fund and test new ways to support innovation from across the ecosystem.

GOV.UK

Collection
Business Basics Programme

The Business Basics Programme is designed to test innovative ways of encouraging small and medium sized enterprises to adopt existing technologies and management practices to improve their productivity.

Horizon 2020
European Union Funding
for Research & Innovation

INNOSUP-06-2018

European Commission programme to help innovation agencies design and test new innovation support programmes

Read our proposal for experimentation funds here.

Why are experimentation funds useful?

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New ideas for support programmes are everywhere in the ecosystem, not just in government buildings

BUT

There is no mechanism to distinguish between programmes that should be scaled vs well-intentioned but ineffective efforts

Experimentation funds to identify, test and support the most promising interventions
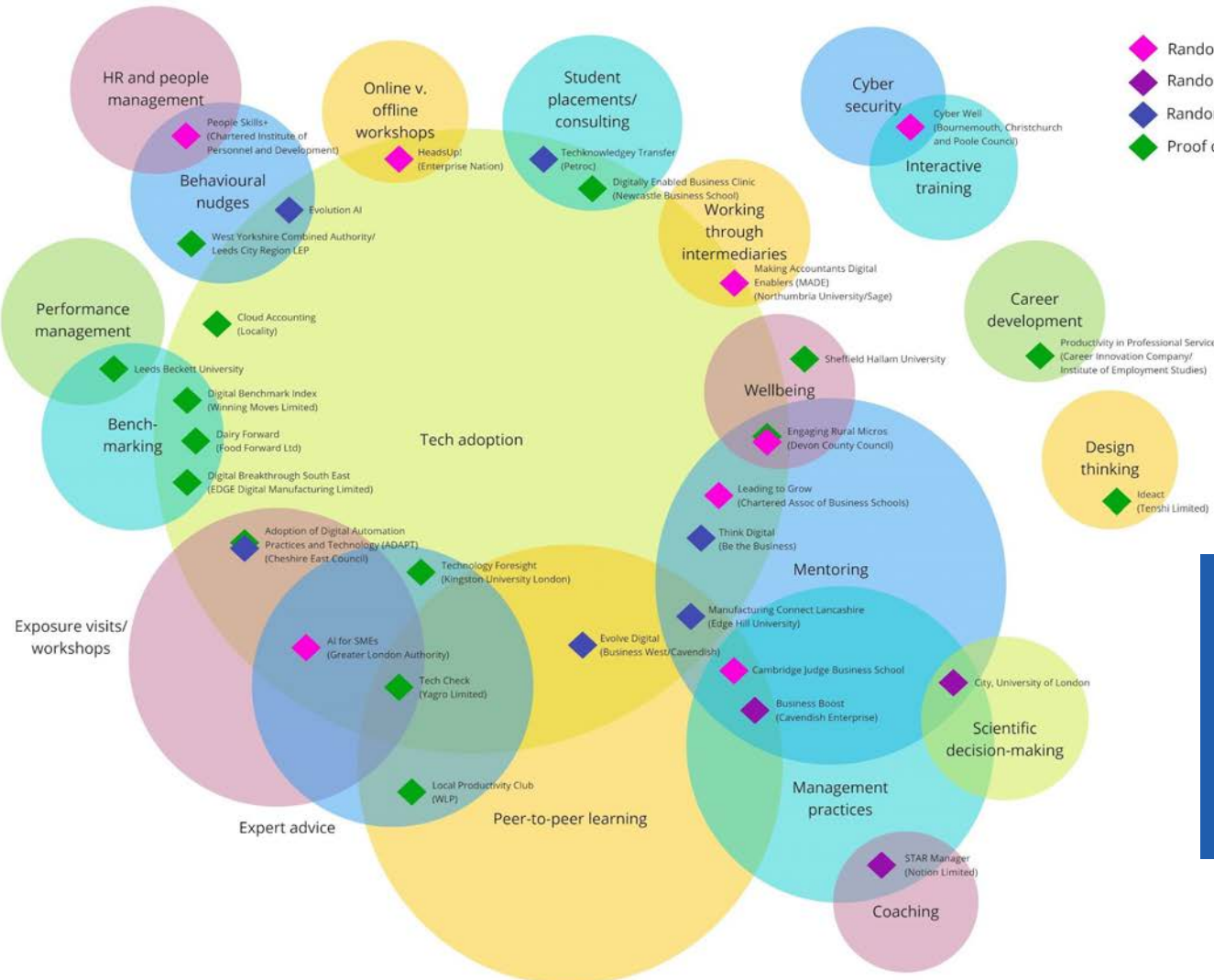
Encourage innovative policy ideas	Fund programmes in exchange for rigorous evaluation
Learn what works best (a public good) and scale it up	Create a culture of innovation and evidence

→ Can be targeted to a particular policy challenge, and provide funding and advisory support for both small proof of concepts & larger scale trials

Legend:
◆ Randomised trial (as designed)
◆ Randomised trial (as implemented)
◆ Randomised trial (ongoing)
◆ Proof of concept

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HR and people management

People Skills+
(Chartered Institute of
Personnel and Development)

Behavioural nudges

Online v. offline workshops

HeadsUp!
(Enterprise Nation)

Evolution AI

West Yorkshire Combined Authority/
Leeds City Region LEP

Student placements/ consulting

Techknowledgey Transfer
(Petroc)

Digitally Enabled Business Clinic
(Newcastle Business School)

Working through intermediaries

Making Accountants Digital
Enablers (MADE)
(Northumbria University/Sage)

Cyber security

Cyber Well
(Bournemouth, Christchurch
and Poole Council)

Interactive training

Career development

Productivity in Professional Services
(Career Innovation Company/
Institute of Employment Studies)

Performance management

Cloud Accounting
(Locality)

Leeds Beckett University

Digital Benchmark Index
(Winning Moves Limited)

Bench-marking

Dairy Forward
(Food Forward Ltd)

Digital Breakthrough South East
(EDGE Digital Manufacturing Limited)

Tech adoption

Sheffield Hallam University

Wellbeing

Engaging Rural Micros
(Devon County Council)

Leading to Grow
(Chartered Assoc of Business Schools)

Think Digital
(Be the Business)

Design thinking

Ideact
(Tenshi Limited)

Adoption of Digital Automation
Practices and Technology (ADAPT)
(Cheshire East Council)

Technology Foresight
(Kingston University London)

Mentoring

Manufacturing Connect Lancashire
(Edge Hill University)

Exposure visits/ workshops

AI for SMEs
(Greater London Authority)

Tech Check
(Yagro Limited)

Evolve Digital
(Business West/Cavendish)

Cambridge Judge Business School

City, University of London

Business Boost
(Cavendish Enterprise)

Scientific decision-making

Local Productivity Club
(WLP)

Expert advice

Peer-to-peer learning

Management practices

STAR Manager
(Notion Limited)

Coaching

Business Basics Fund, a UK government programme in partnership with IGL, has invested in projects testing a wide range of different approaches.

Read more about the UK Business Basics Experimentation fund here

INNOSUP-06-2018

European Commission programme supported by IGL to help innovation agencies design and test new innovation support programmes

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projects involving 14 different European countries, some of which had never engaged with experimentation before.
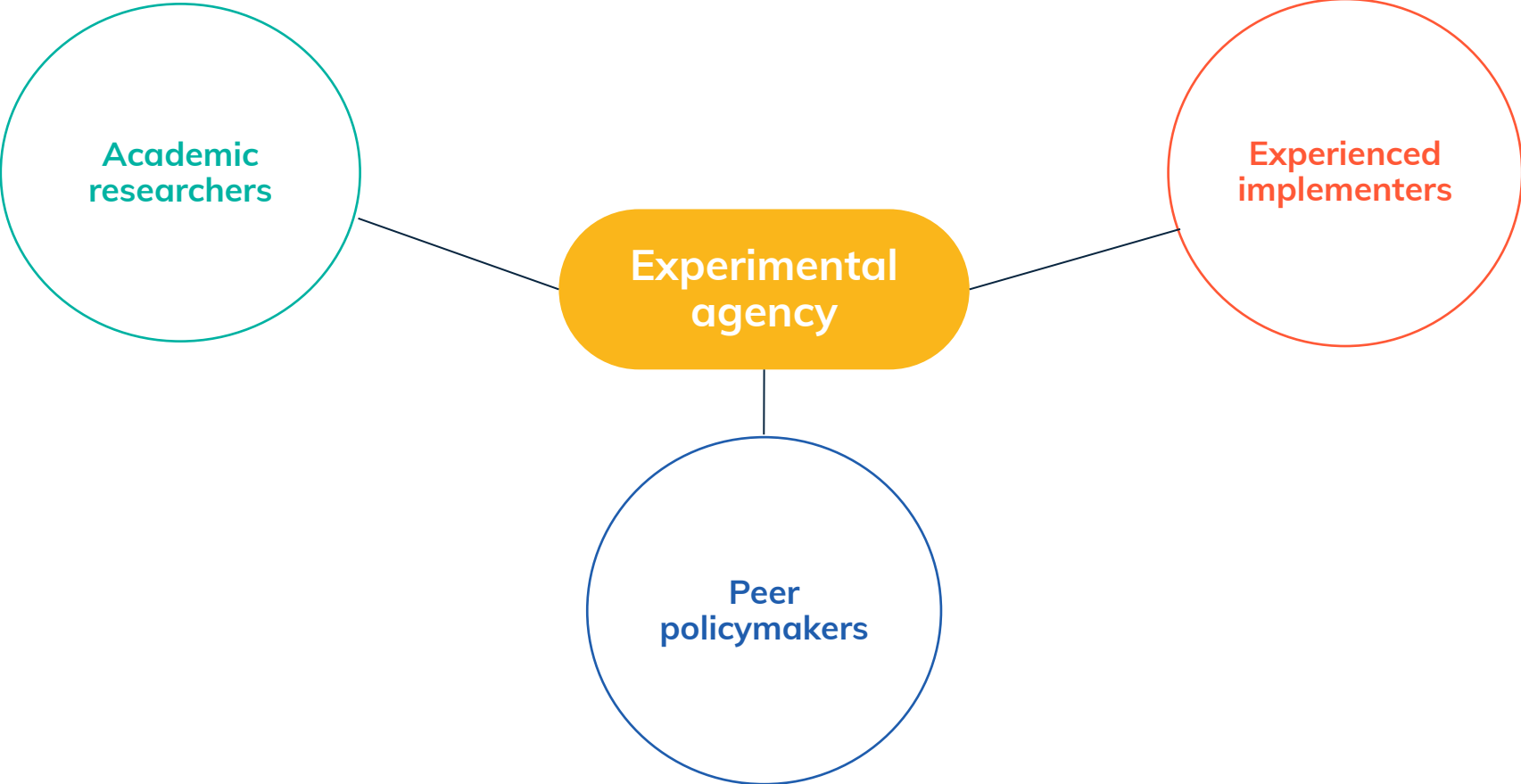
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innovation agencies across Europe actively involved as well as academics and evaluation experts.

Horizon 2020
European Union Funding
for Research & Innovation

Explore INNOSUP-06

Read more about some of the challenges and lessons of this Innosup programme here

Successful execution of experiments is a team sport

Academic researchers

Experienced implementers

Experimental agency

Peer policymakers

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