

Better innovation policy through experimentation

Teo Firpo (IGL)

18 December, 2018



Nesta is the UK's Innovation Foundation



IGL is a global collaboration of governments, foundations and researchers that aims to make innovation policy more experimental

€150 billion
spent every year on
innovation,
entrepreneurship and
business growth
support programmes
in Europe alone

But little credible
evidence on what
works, and what
doesn't

We spend a lot of public money on innovation – but does it work?

All Support Schemes

Good evaluations
can change people's
minds and lead to
better decisions

But most impact
evaluations are not
credible



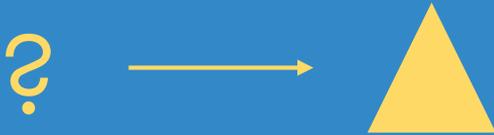
14740
evaluations

Credible (2.4%)

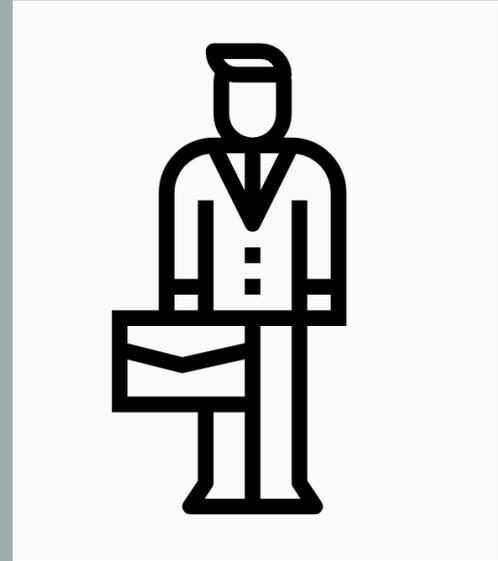
+ Impact (0.6%)

Policymakers often face
complex challenges without
clear solutions

Traditional approach



Example:



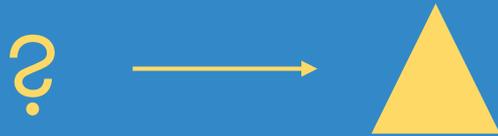
Example:

1. Events?
2. Training for SMEs?
3. Training for universities?
4. Money?

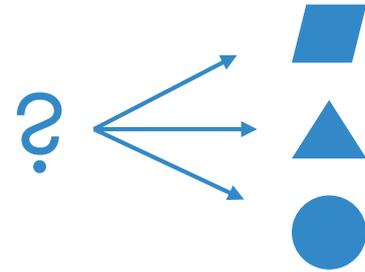
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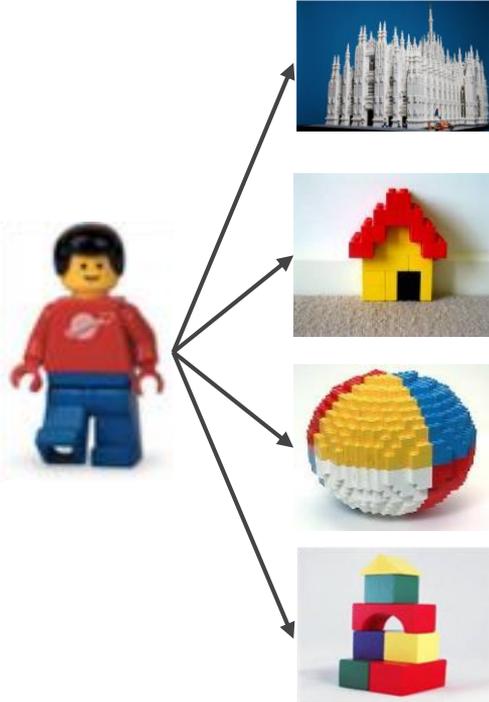


Experimental approach



Trial different designs to discover what's best

1. Experiment



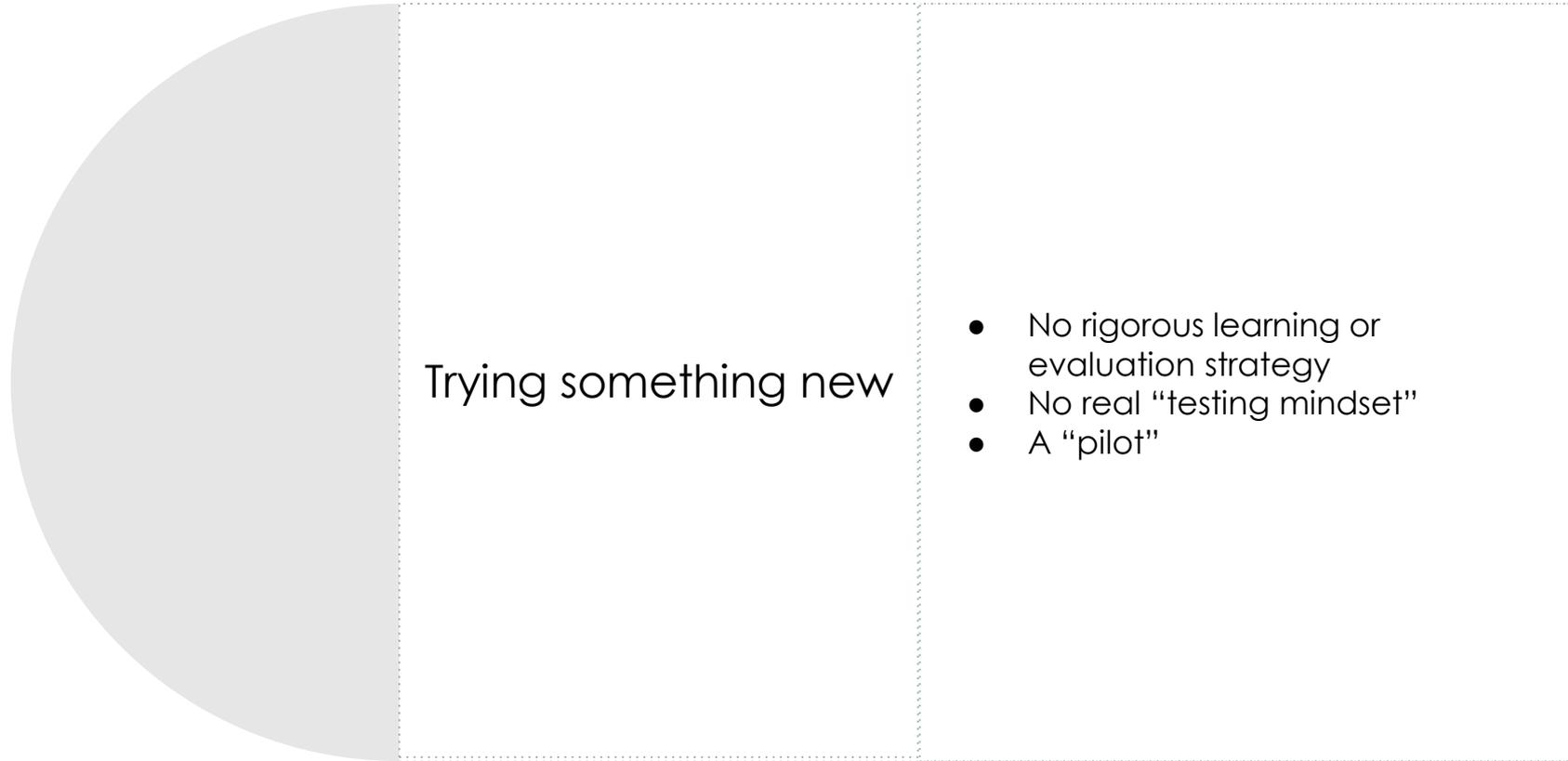
2. Evaluate



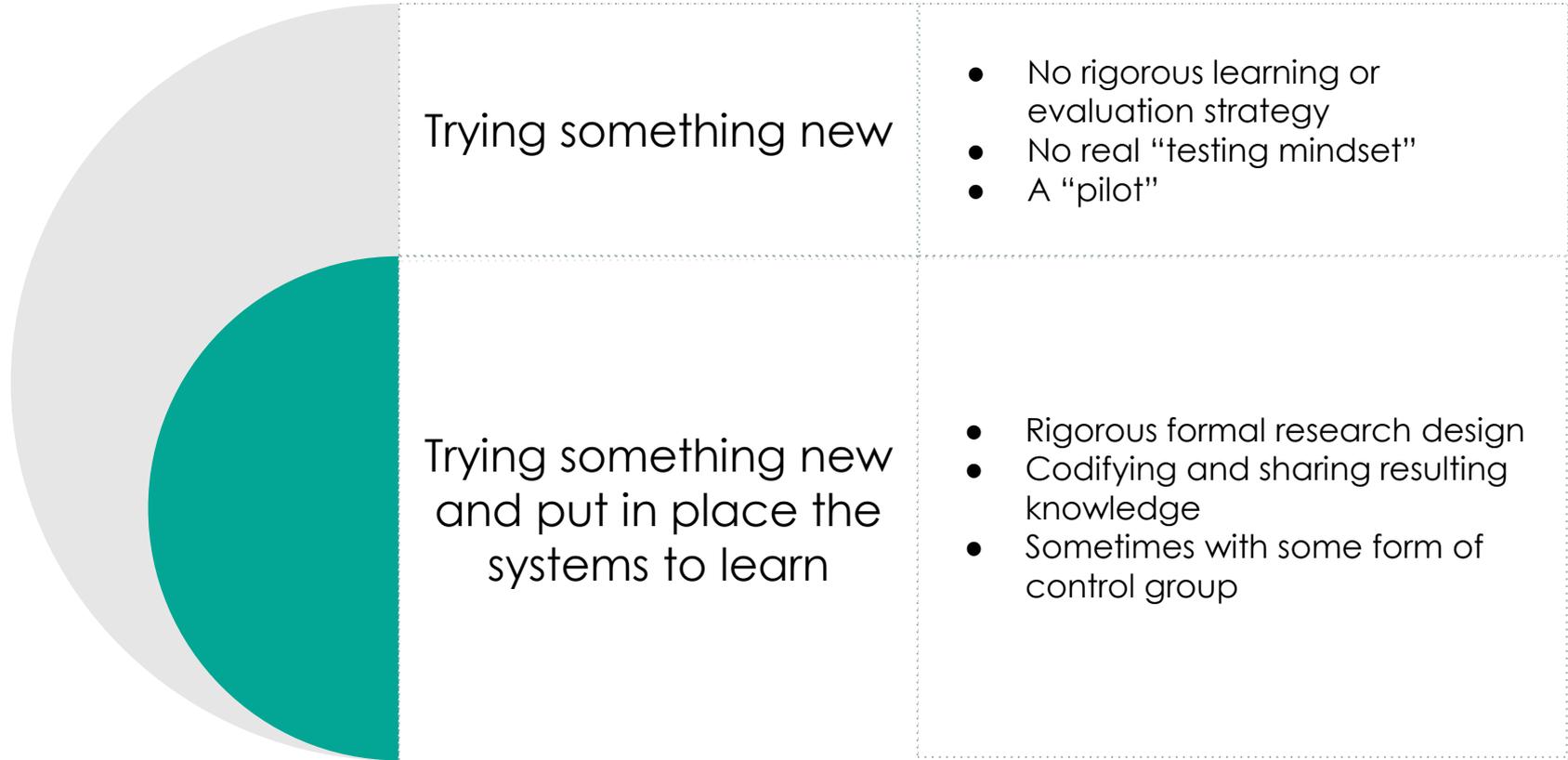
3. Scale-up



What is really an experiment?



What is really an experiment?



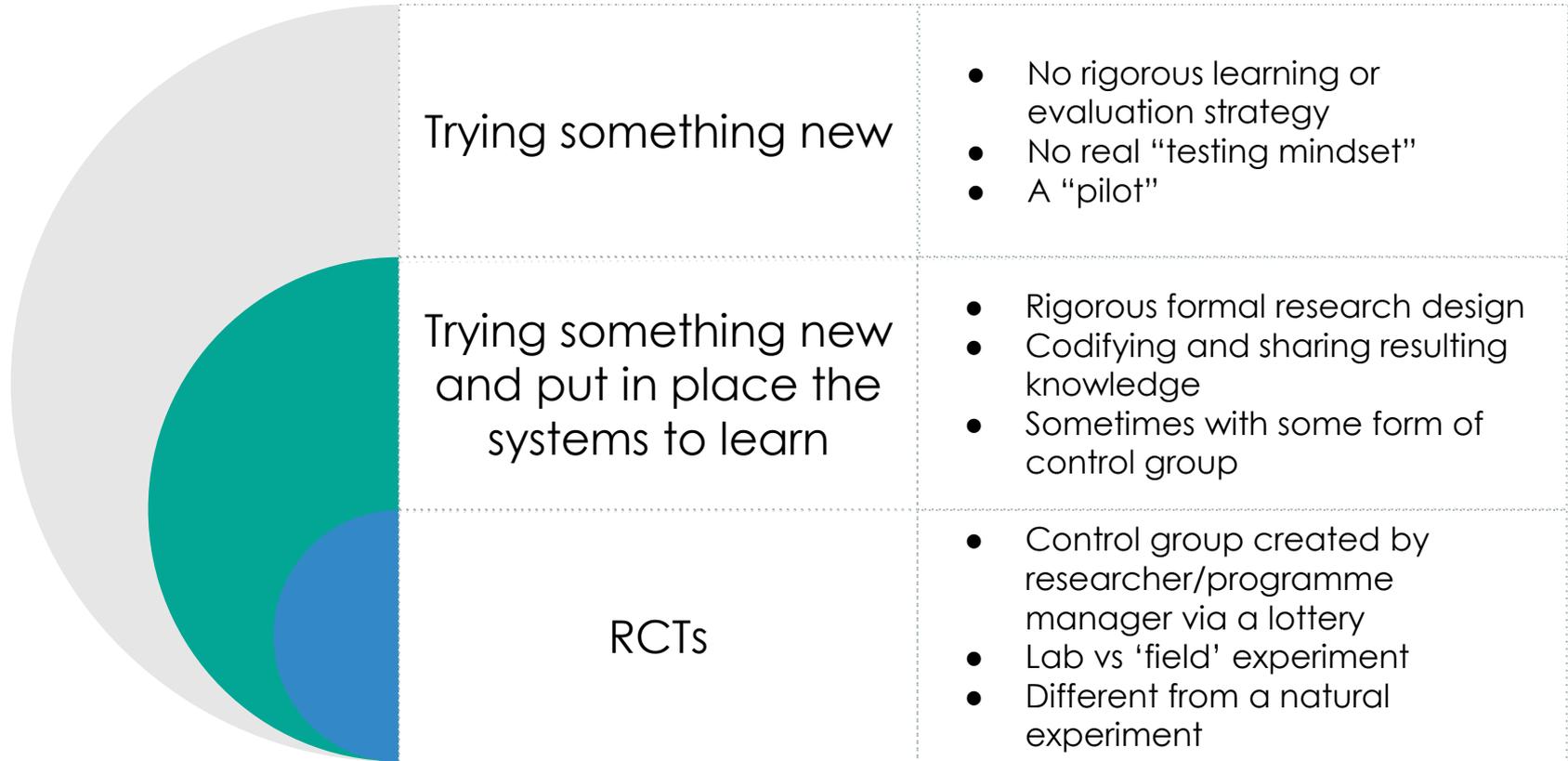


Many ways to generate evidence

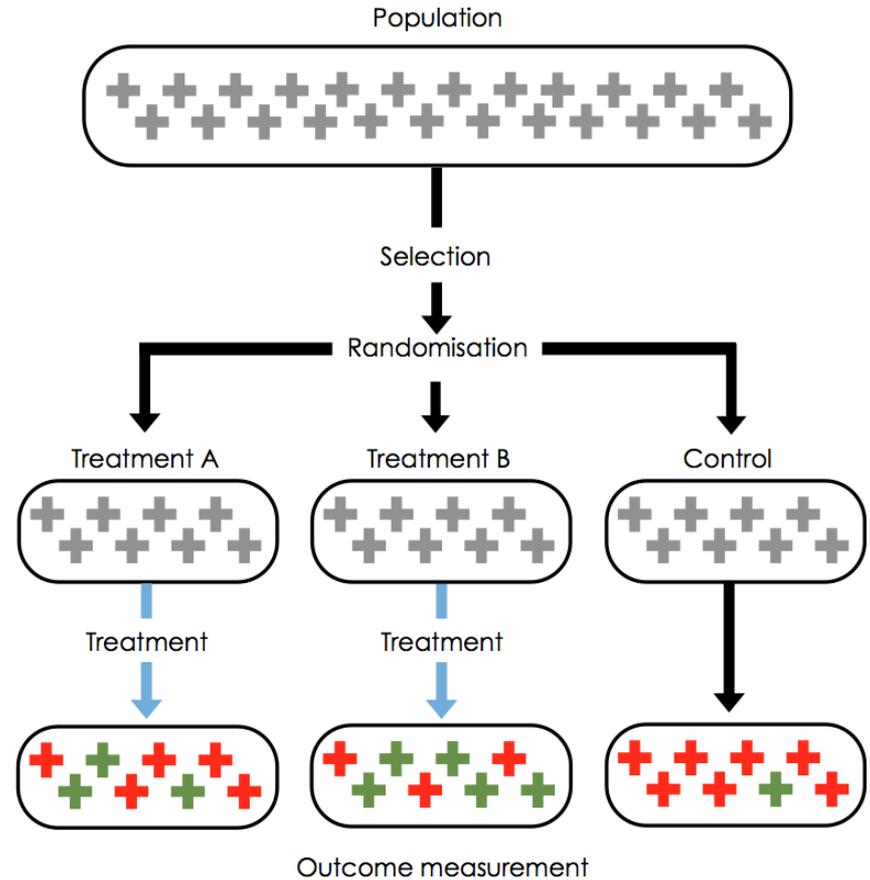


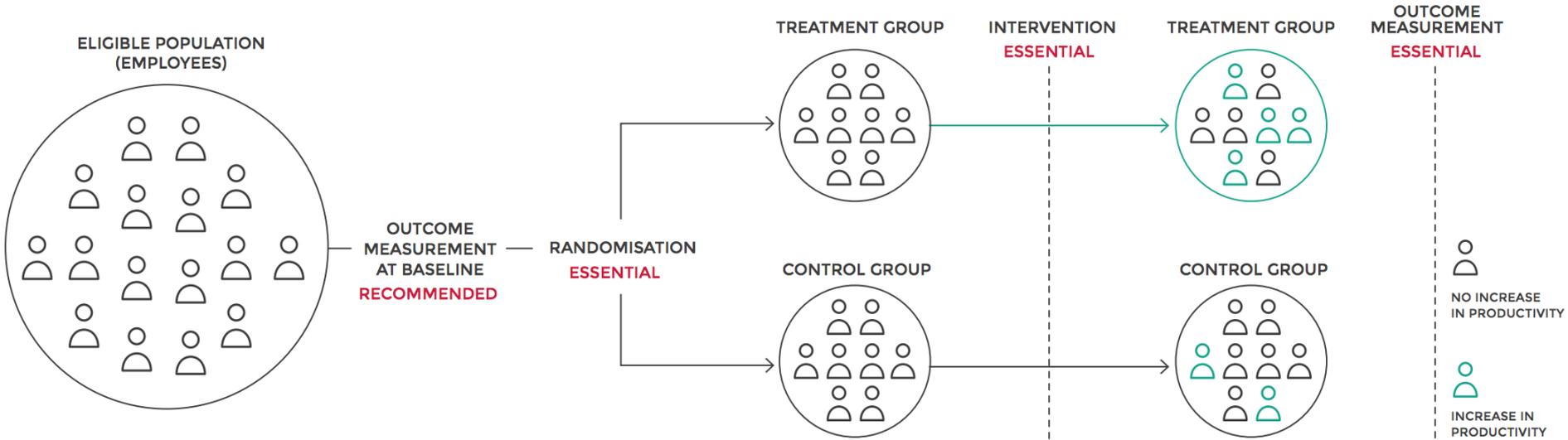
Adapted from: Luff et al. (2015)

What is really an experiment?



What is a randomised controlled trial (RCT)?





Can you really do this?

Increasing business-science links and technology transfer

Can innovation vouchers “nudge” SMEs to build successful collaborations with knowledge providers, and help SMEs grow?

Max Planck Institute for Innovation and Competition



Nesta...

CREATIVE CREDITS
A RANDOMIZED CONTROLLED
INDUSTRIAL POLICY
EXPERIMENT

Hasan Bakhshi, John Edwards, Stephen Roper, Judy Scully, Duncan Shaw, Lorraine Morley and Nicola Rathbone

June 2013



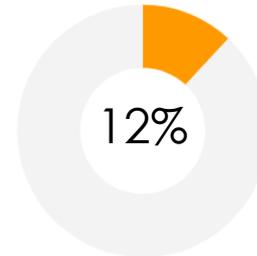
Creative Credits were developed as a way to encourage SMEs to innovate in partnership with creative service providers

Impact was evaluated using a Randomised Controlled Trial

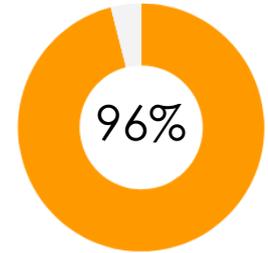
From 672 eligible applications, 150 were selected by lottery to receive Creative Credits

Strong short
term impacts
no evidence
of long-term
change

Undertaken the creative collaboration project
four months later



Control



Treatment

...but no evidence that this high level of
additionality fed through into long-term impacts
on behaviour or business performance

Increasing business-science links and technology transfer

Another example in the Netherlands – the ‘lottery’ happened by accident!

Cornet et al (2016)



A few more examples

Can scientists be encouraged to collaborate more by reducing the 'search costs' to find potential collaborators?

Collaborators need information (e.g. skills, resources, availability) this comes at a cost.

The researchers designed an experiment to see...

If reducing the search costs by facilitating face-to-face interactions **increased collaborations** amongst a group of researchers?

Experiment constructed
around a funding
opportunity for Harvard
biomedical researchers

Treated Pairs: same
workshop

Control Pairs: different
workshop

↑ **75%**

Increase in probability of
collaboration if in the
same room

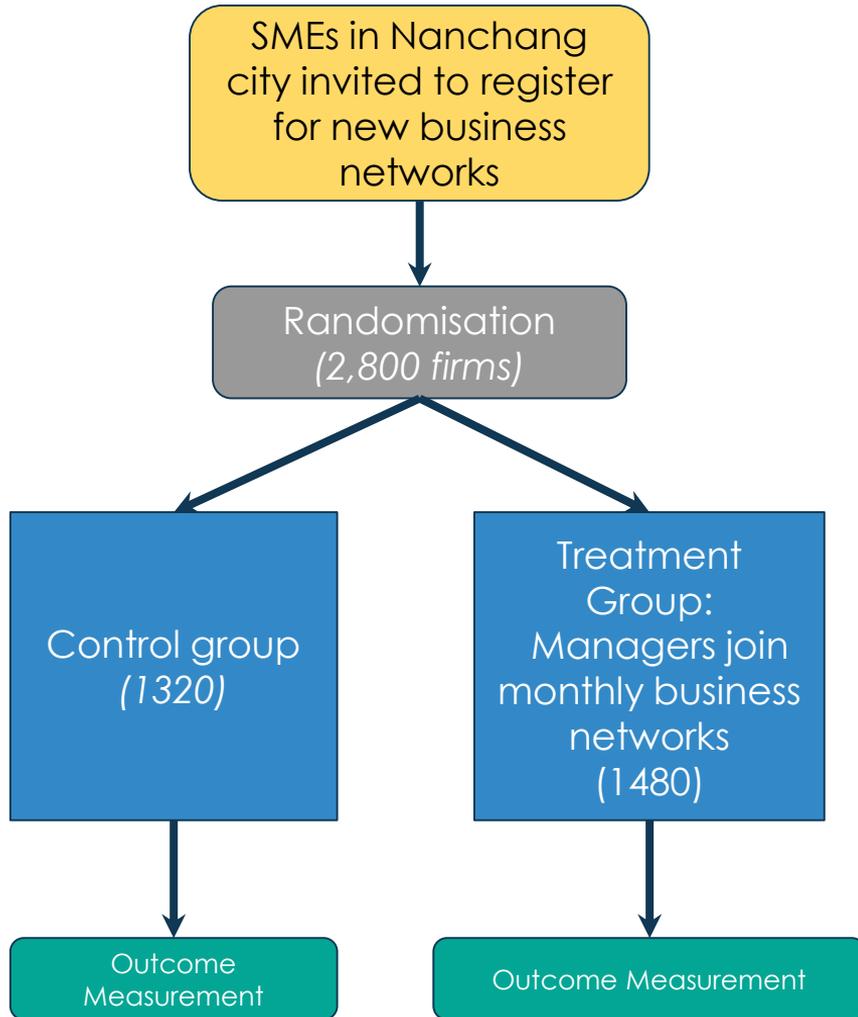
Do business networking events help business to innovate and grow?

Networking provides access to information, new ideas and opportunities

But there are search costs, coordination and information failure

Researcher's questions...

What is the impact of an expansion in a manager's network? What are the mechanisms?



Those assigned to networks performed better

- Increased revenue 8%
- Also significantly increased profits, innovation, partners and management score
- Benefits greater if network larger peers

New experimentation funds in innovation and growth policy



Horizon 2020
European Union Funding
for Research & Innovation



Department for
Business, Energy
& Industrial Strategy

- European Commission launched dedicated €4M call to support innovation policy experiments
- UK BEIS Business Basics Programme, an £8M fund for trials testing innovative ways to encourage tech diffusion for SMEs
- Both have two strands
 - Small proof of concept trials
 - Larger scale pilots to test ideas at scale

IGL partners



Australian Government
**Department of Industry,
Innovation and Science**



FFG
Promoting Innovation.



**Department for
Business, Energy
& Industrial Strategy**



Innovate UK



Other organisations we've worked with



This list compiles organisations that we've worked or collaborated with, including former IGL partners, IGL conference partners, and other organisations that we have supported or run capacity-building workshops with.

Some examples



Laboratorio
de Gobierno



**MIND
LAB**



THE
BEHAVIOURAL
INSIGHTS TEAM

Take-aways:

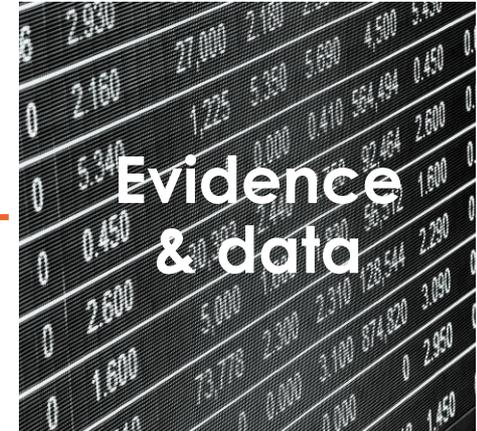
1. To support innovation – we all have to become a bit more innovative
2. Innovation is collaborative – but you have to put in place the right incentives to collaborate, and test what works

Thank you!

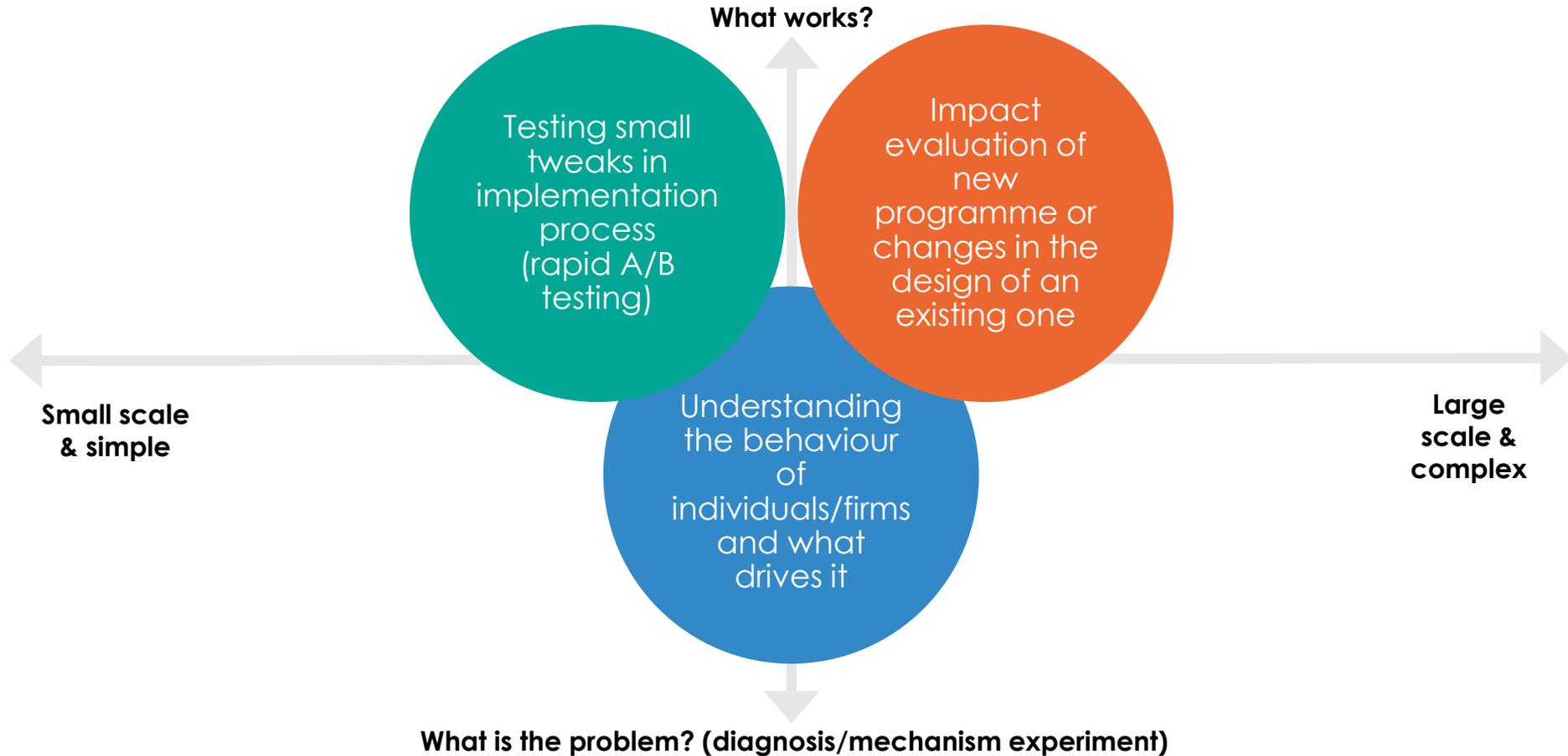
www.innovationgrowthlab.org

teo.firpo@nesta.org.uk

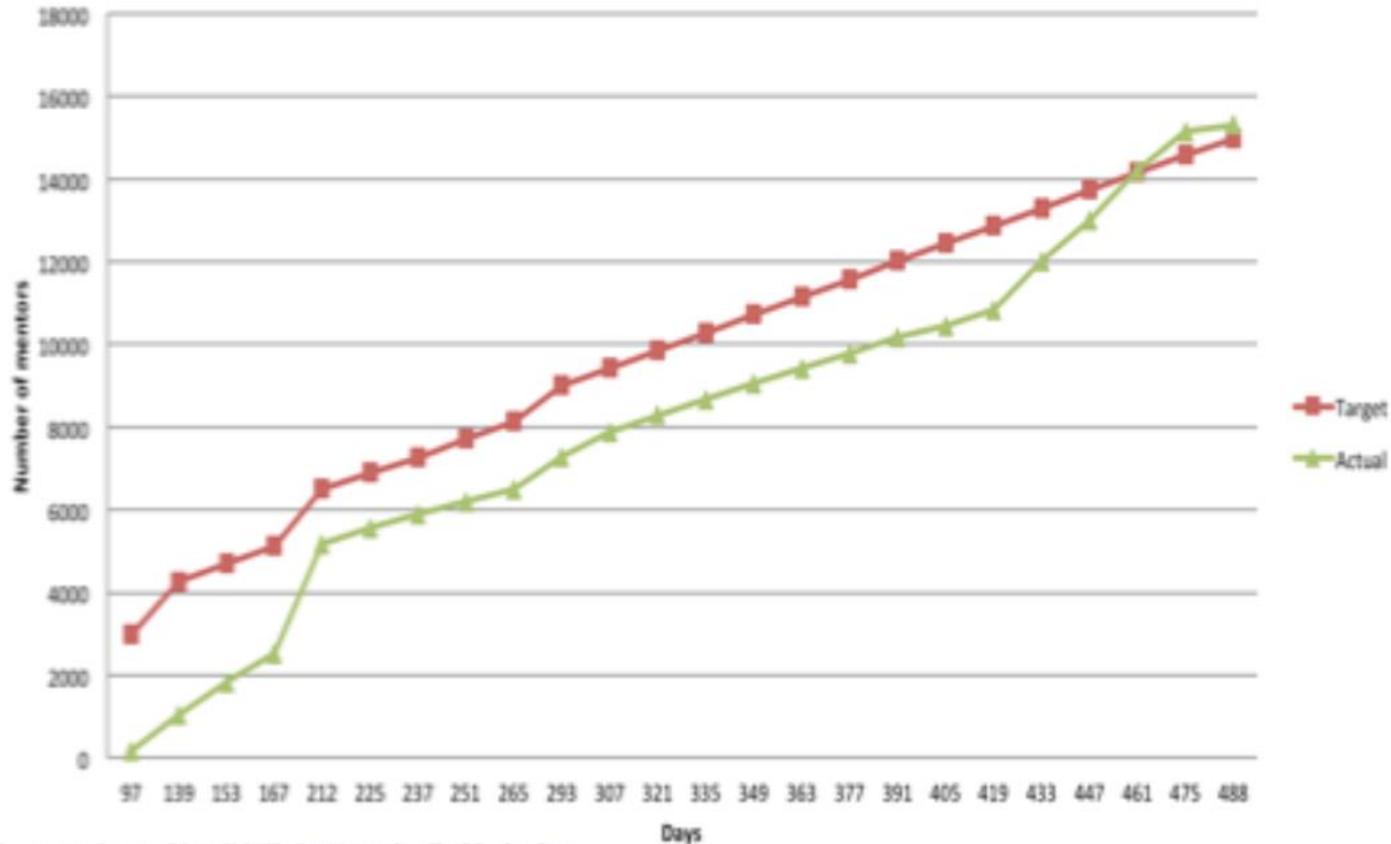
Three ingredients for delivering good policy



There are multiple ways to use trials



Comparison of target and actual number of trained mentors



Source: Hudson and Sear (2013), Get Mentoring Final Evaluation

Growing adoption of experimentation



Increasingly, more governments and organisations are using policy experiments

J-PAL is founded at MIT to reduce global poverty. To date, they have **run over 900 trials in 75+ developing countries**

France creates an **Experimentation Fund for Youth** to fund RCTs that test youth support policies

The UK launches the '**Education Endowment Foundation**', which to date has funded **130 trials with 900.000 pupils in UK schools**

Finland and Canada PMs make experimentation a key political goal, with a **PM's experimentation office** and mandating **dedicated budgets**



Education
Endowment
Foundation



Department for
Business, Energy
& Industrial Strategy

2003

2009

2011

2014

2015

2016

2017

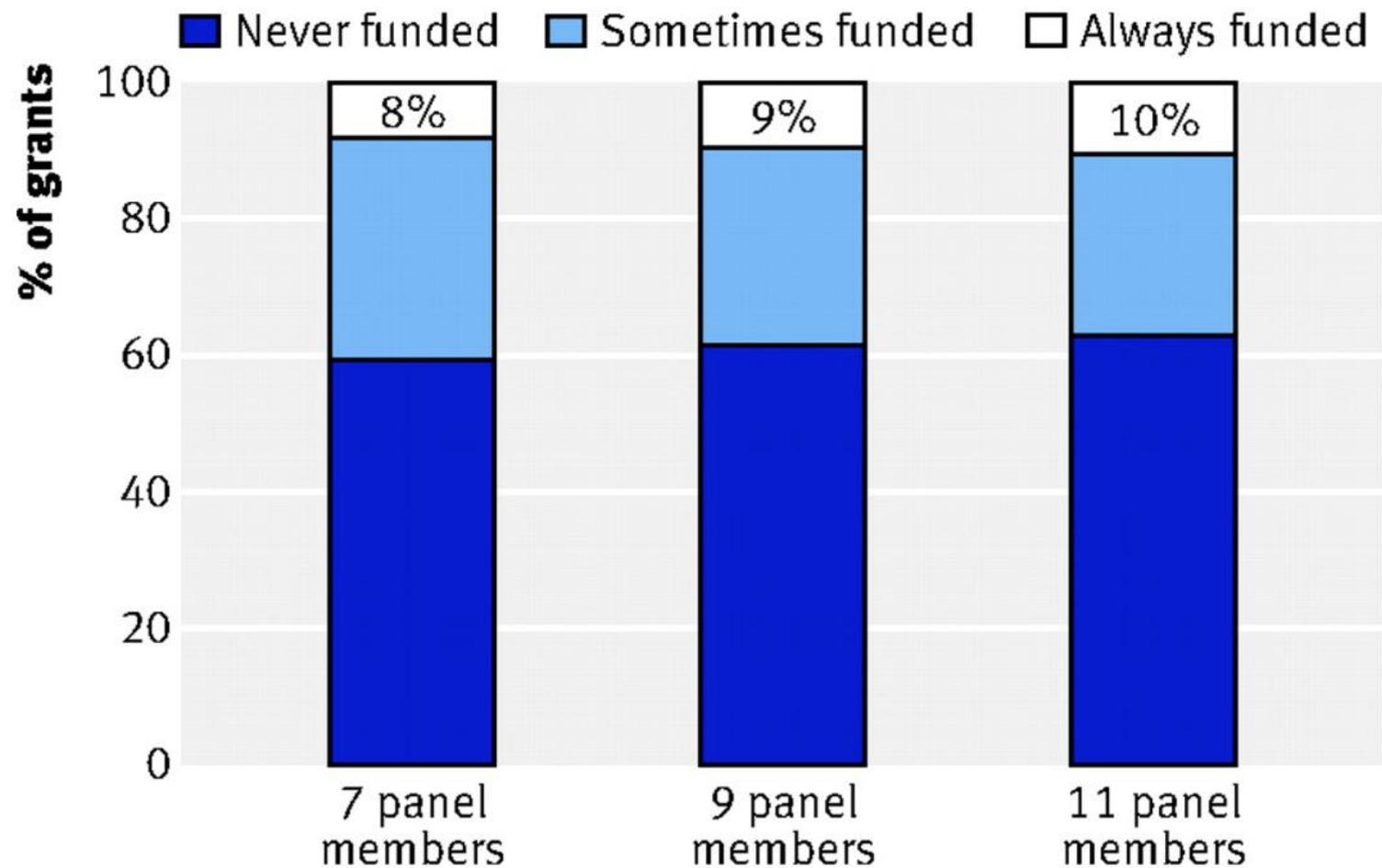
2018

IGL is launched as a **global partnership of government agencies and ministries** based at Nesta

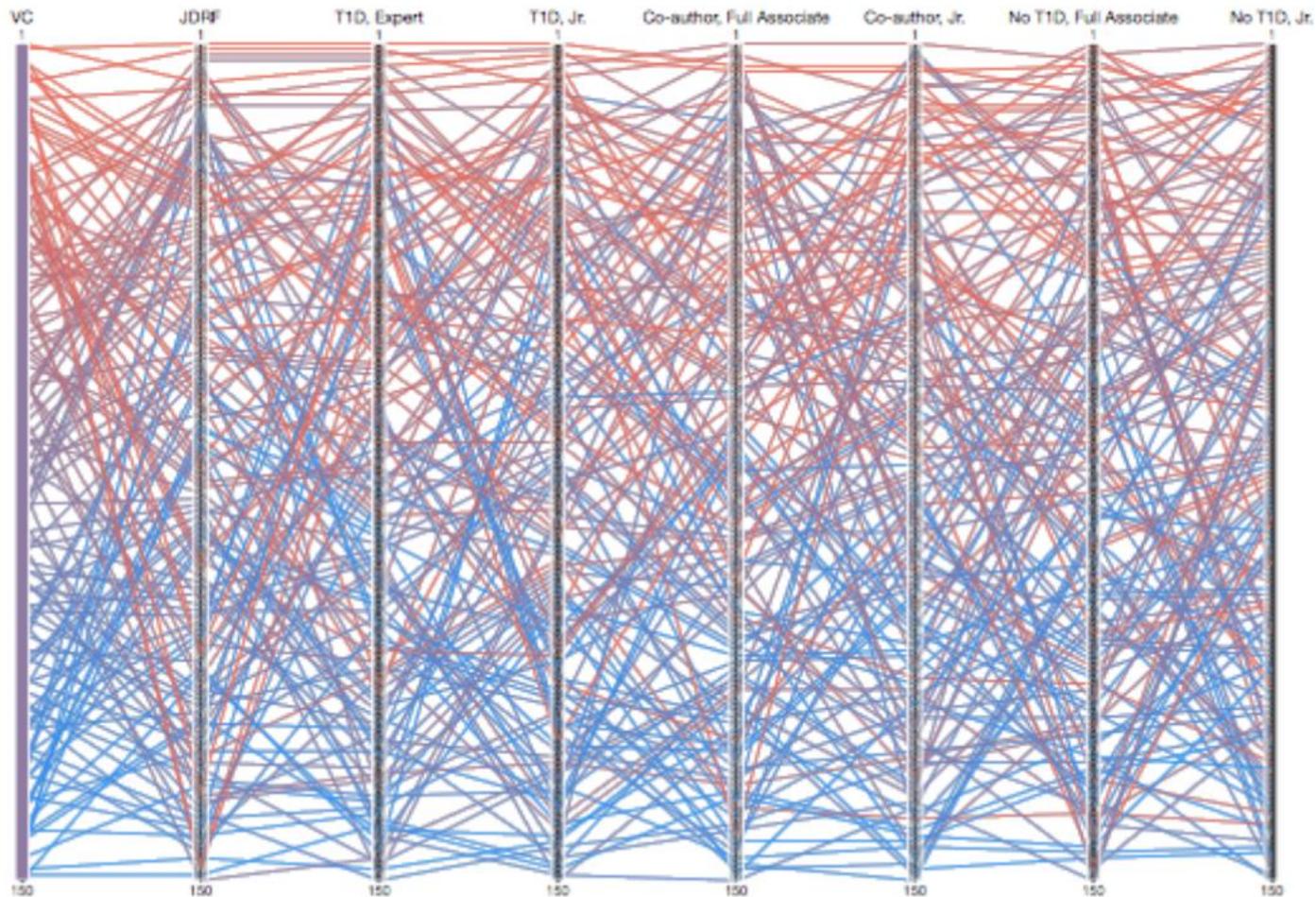
The UK's Dept. for Business launches '**Growth Vouchers**', a **£30M RCT to evaluate business support provided to almost 30,000 SMEs**

The **European Commission** launches a new **€4M call for innovation agencies to test new pilots using RCTs**

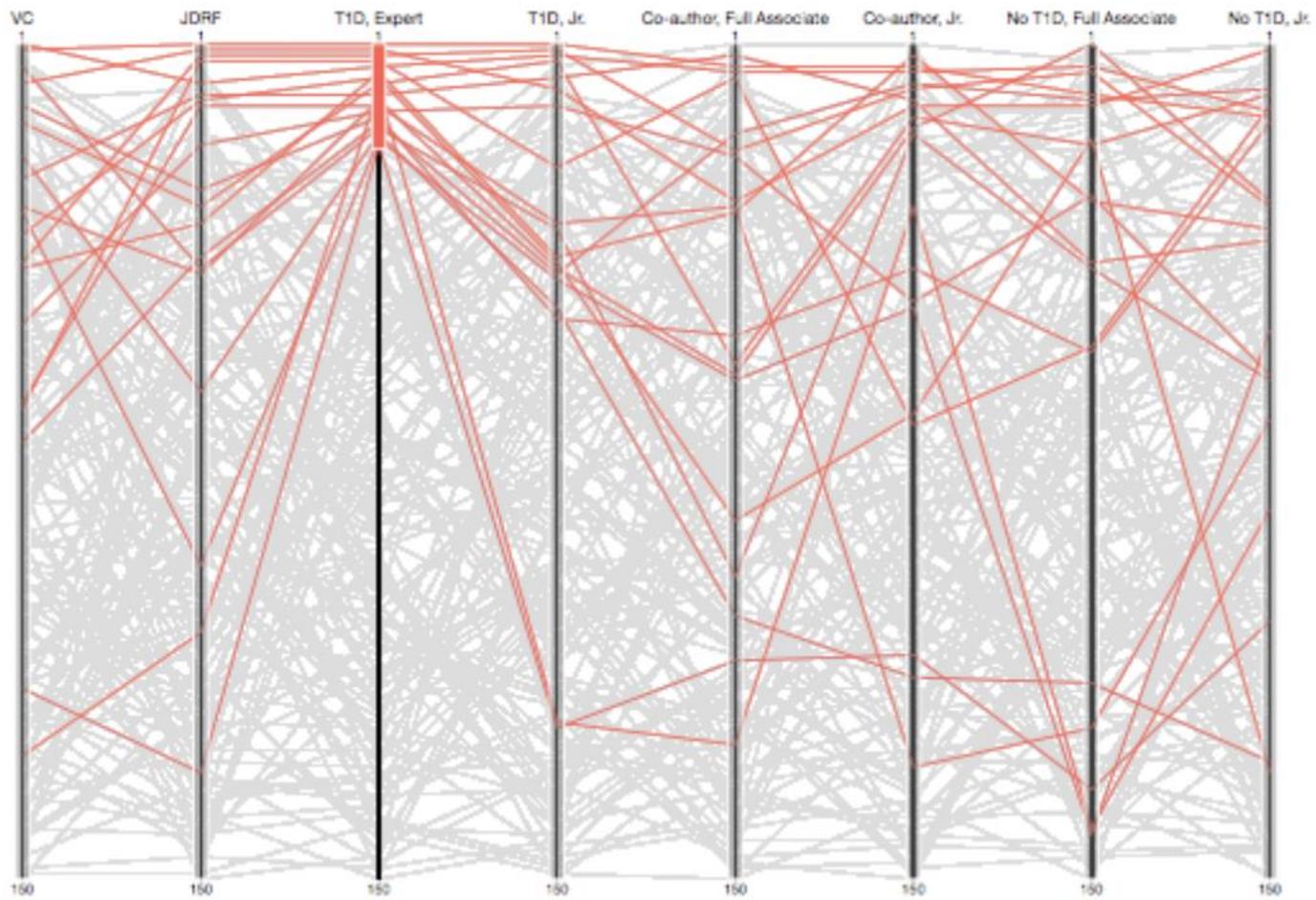
The UK's Dept. for Business launches '**Business Basics**', a **£8M fund for RCTs on innovative ways to encourage tech diffusion for SMEs**



Source: Graves et al 2011, BMJ



Source: Boudreau et al 2016



Source: Boudreau et al 2016