

# Better innovation policy through experimentation

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18 December, 2018



[@IGLglobal](https://twitter.com/IGLglobal)



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

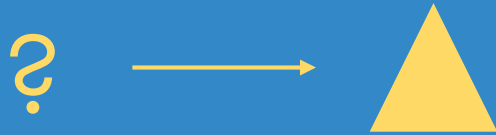
**Credible (2.4%)**

**+ Impact (0.6%)**

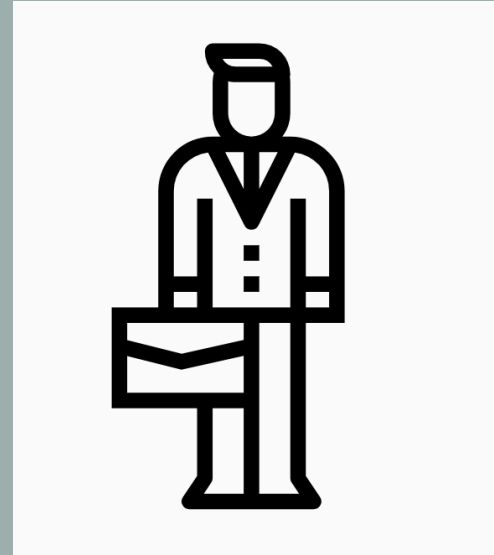
Source: Systematic reviews conducted by the What Works Centre for Local Economic Growth at the LSE (Credible: Level 3 Maryland Scale – Positive impact on employment)

Policymakers often face  
complex challenges without  
clear solutions

# Traditional approach



# Example:





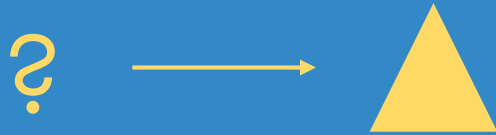
## Example:

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

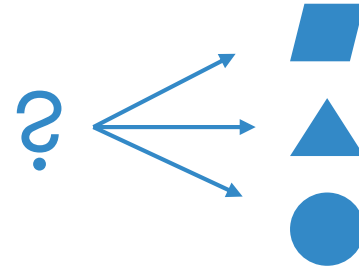
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# Traditional approach

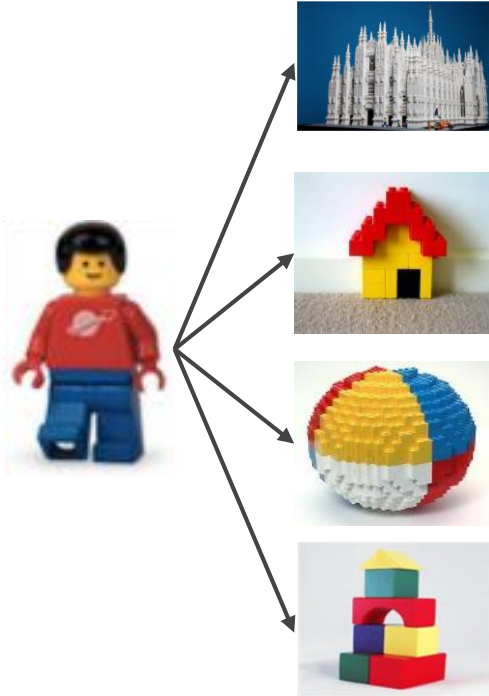


# Experimental approach



# Trial different designs to discover what's best

## 1. Experiment



## 2. Evaluate



## 3. Scale-up



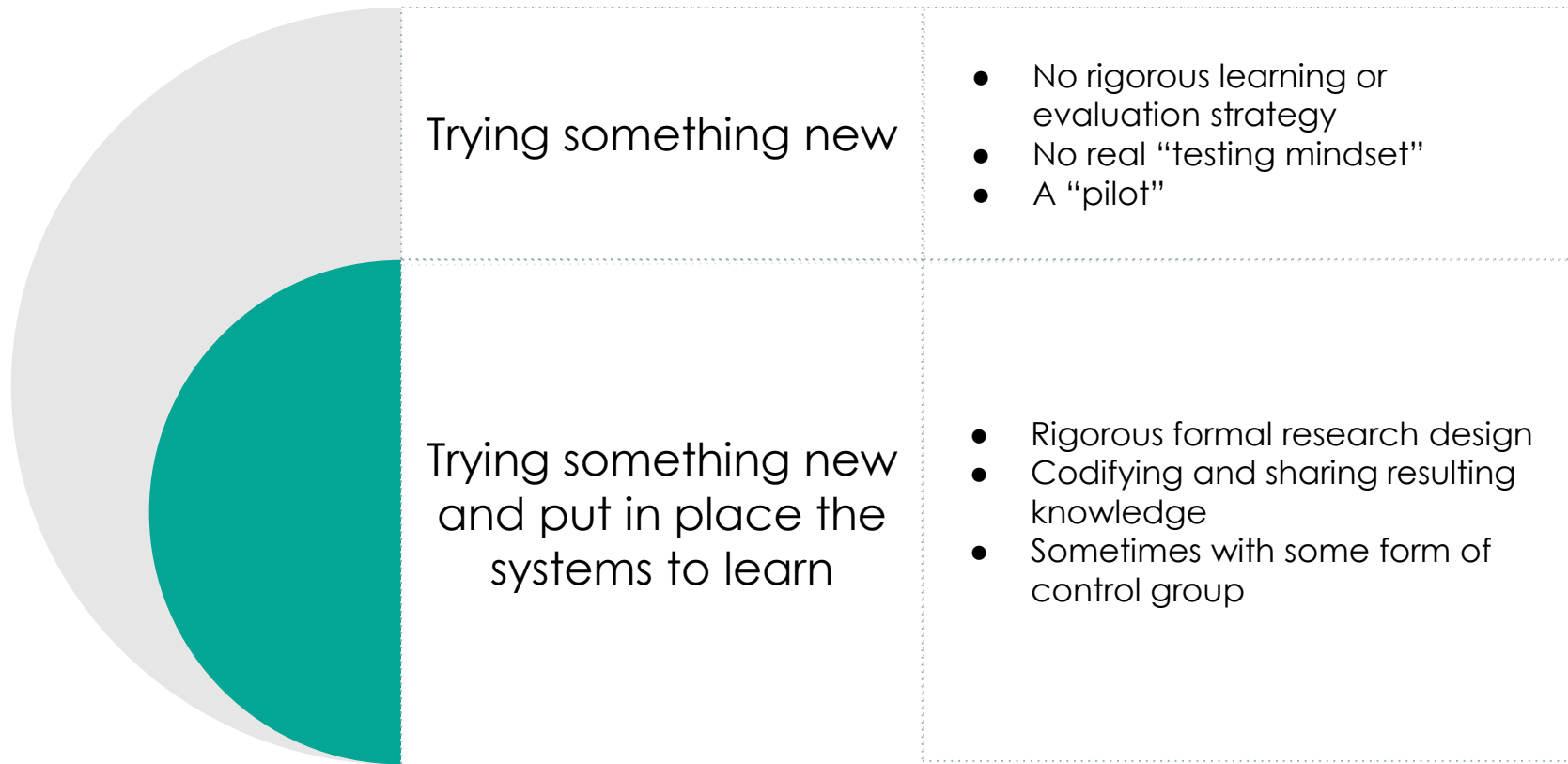
# What is really an experiment?

A large diagram consisting of a circle divided vertically by a dashed line. The left half of the circle is shaded light gray. The right half is white and contains a bulleted list. The text 'Trying something new' is centered in the white half.

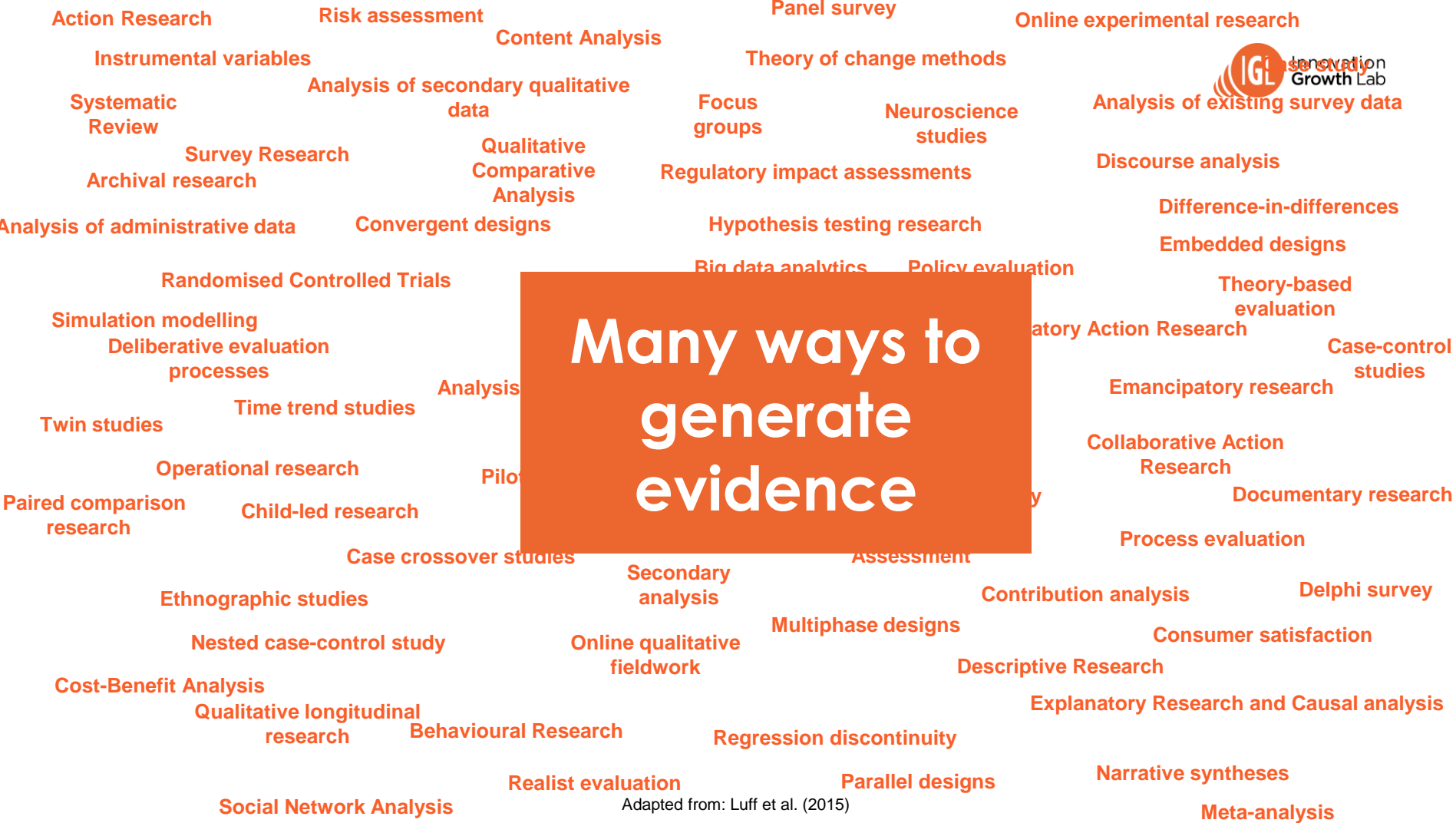
Trying something new

- No rigorous learning or evaluation strategy
- No real “testing mindset”
- A “pilot”

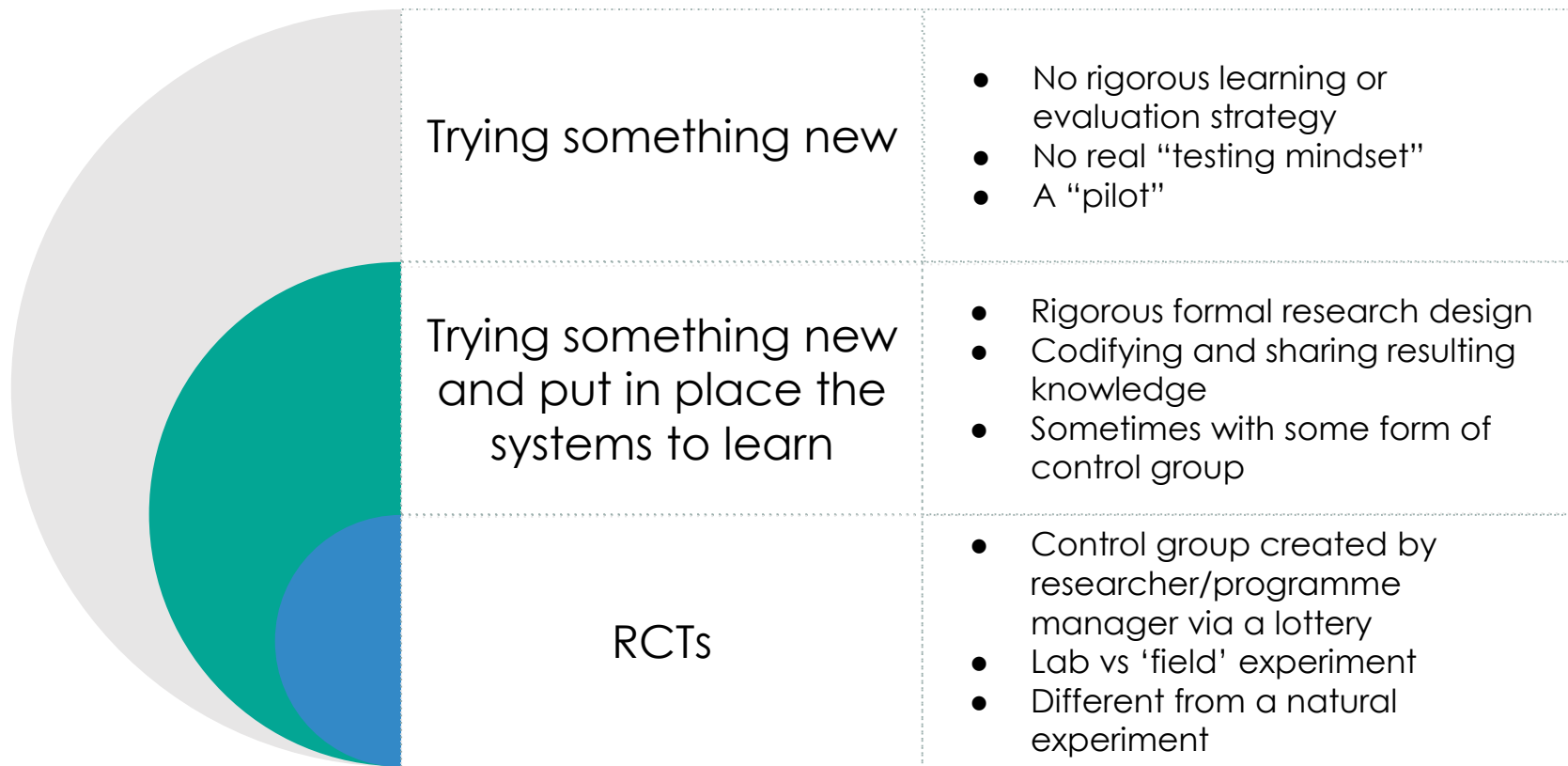
# What is really an experiment?



# Many ways to generate evidence

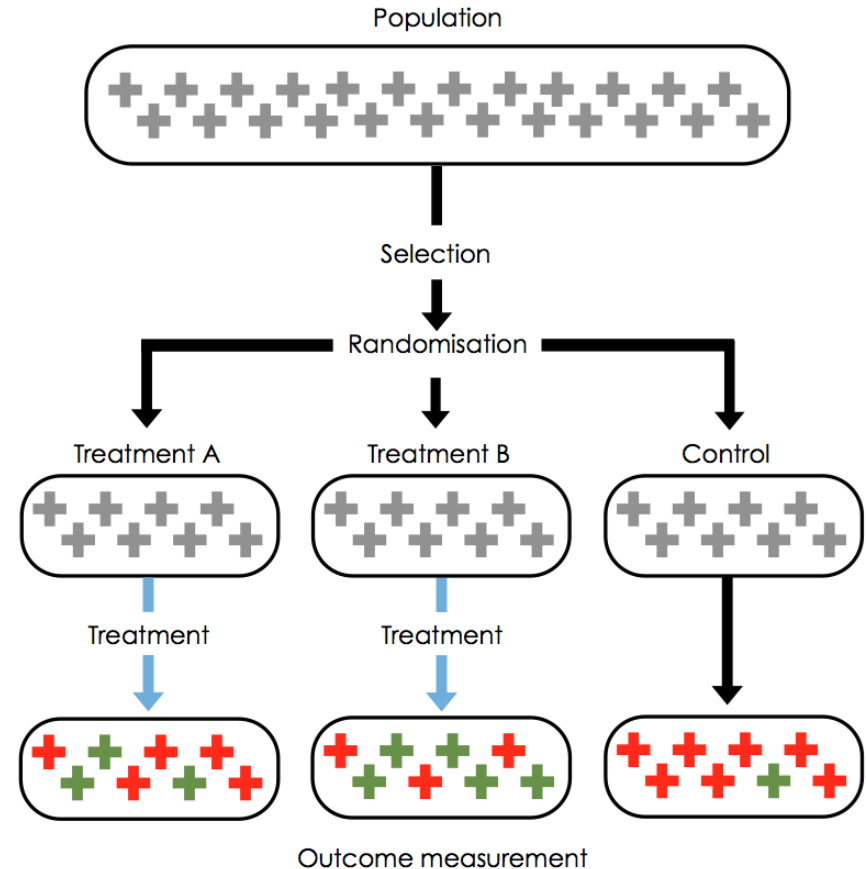


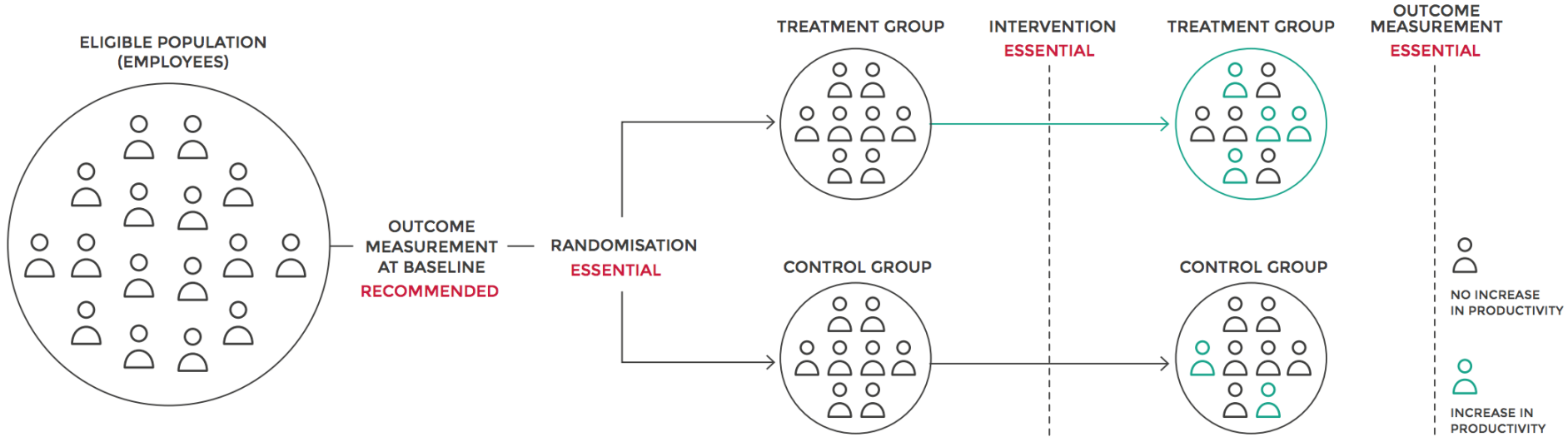
# What is really an experiment?





# 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



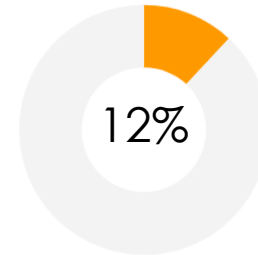
Creative Credits were developed as a way to encourage SMEs to innovate in partnership with creative service providers

Impact was evaluated using a Randomised Controlled Trial

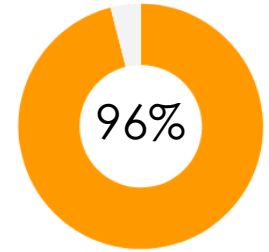
From 672 eligible applications, 150 were selected by lottery to receive Creative Credits

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?

"A Field Experiment on Search Costs and the Formation of Scientific Collaborations", Boudreau et al (2017)

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

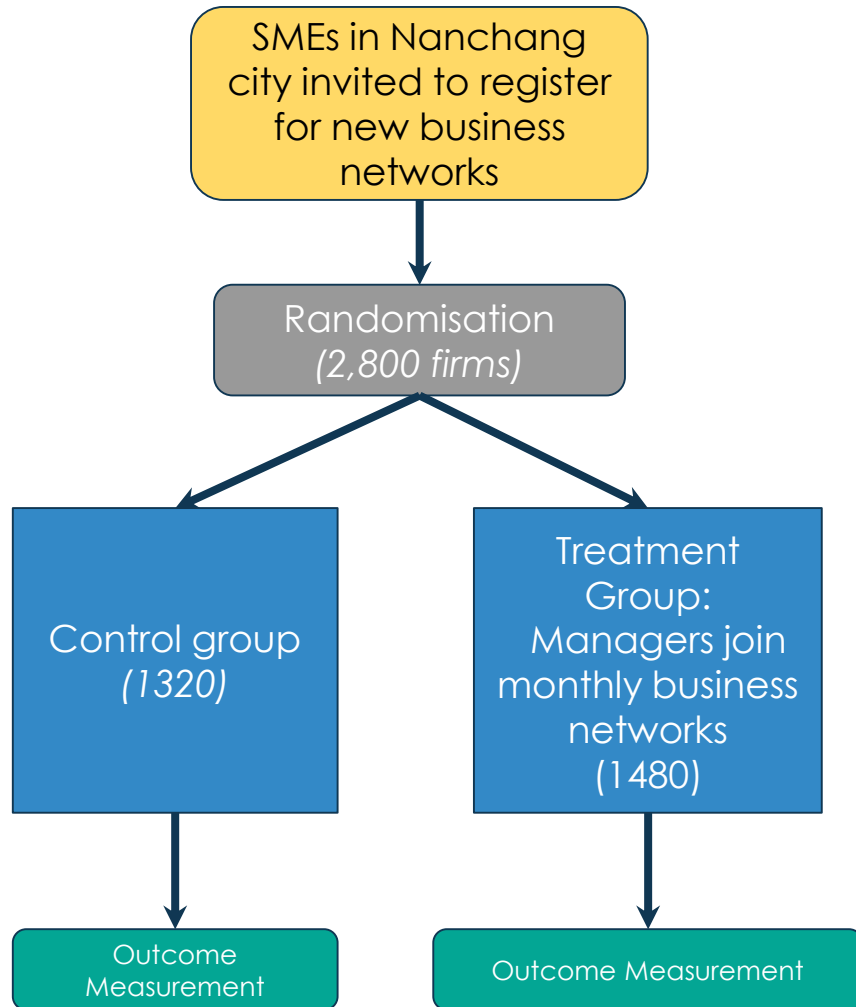
# Do business networking events help business to innovate and grow?

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



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!

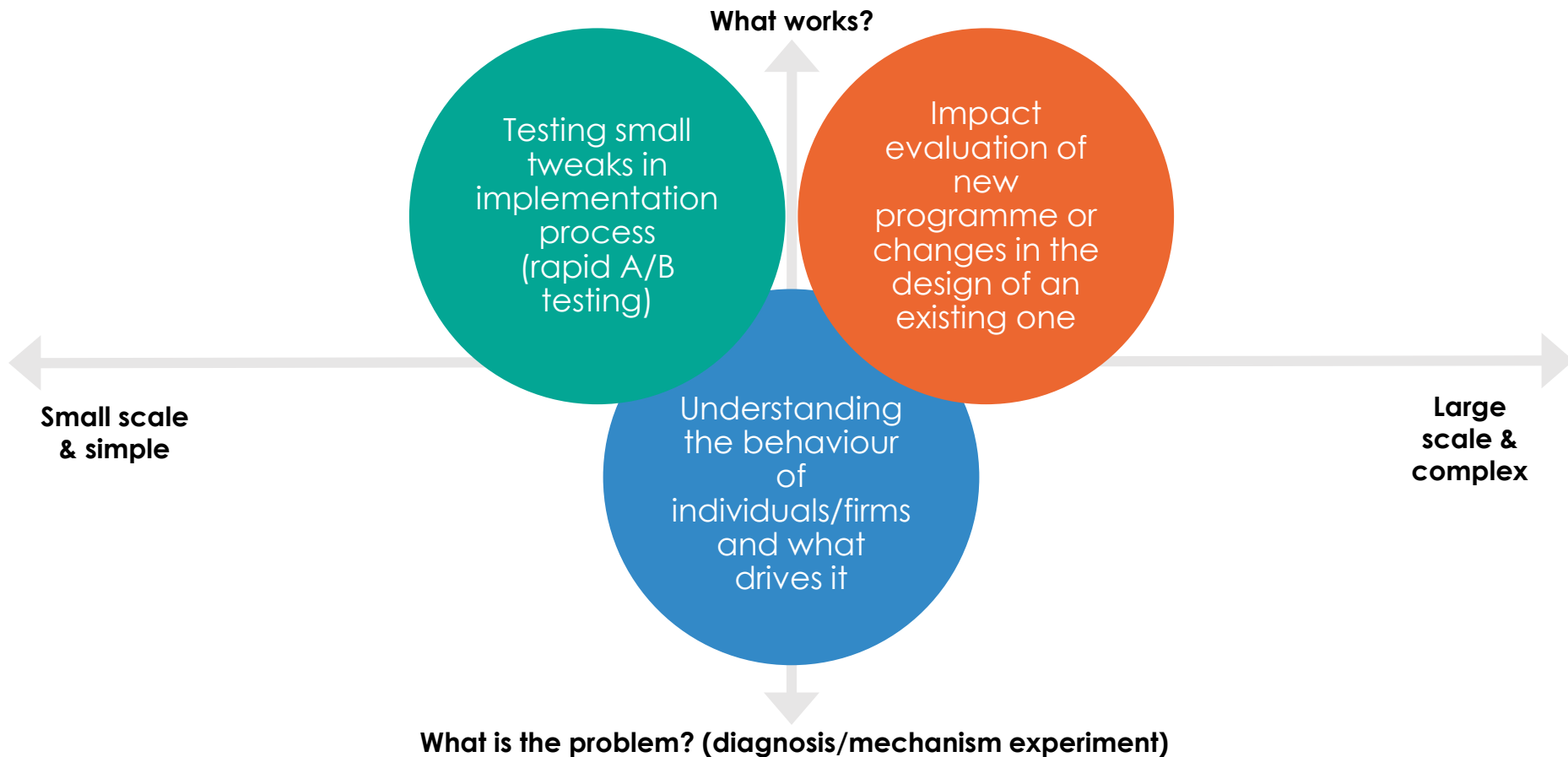
[www.innovationgrowthlab.org](http://www.innovationgrowthlab.org)

[teo.firpo@nesta.org.uk](mailto:teo.firpo@nesta.org.uk)

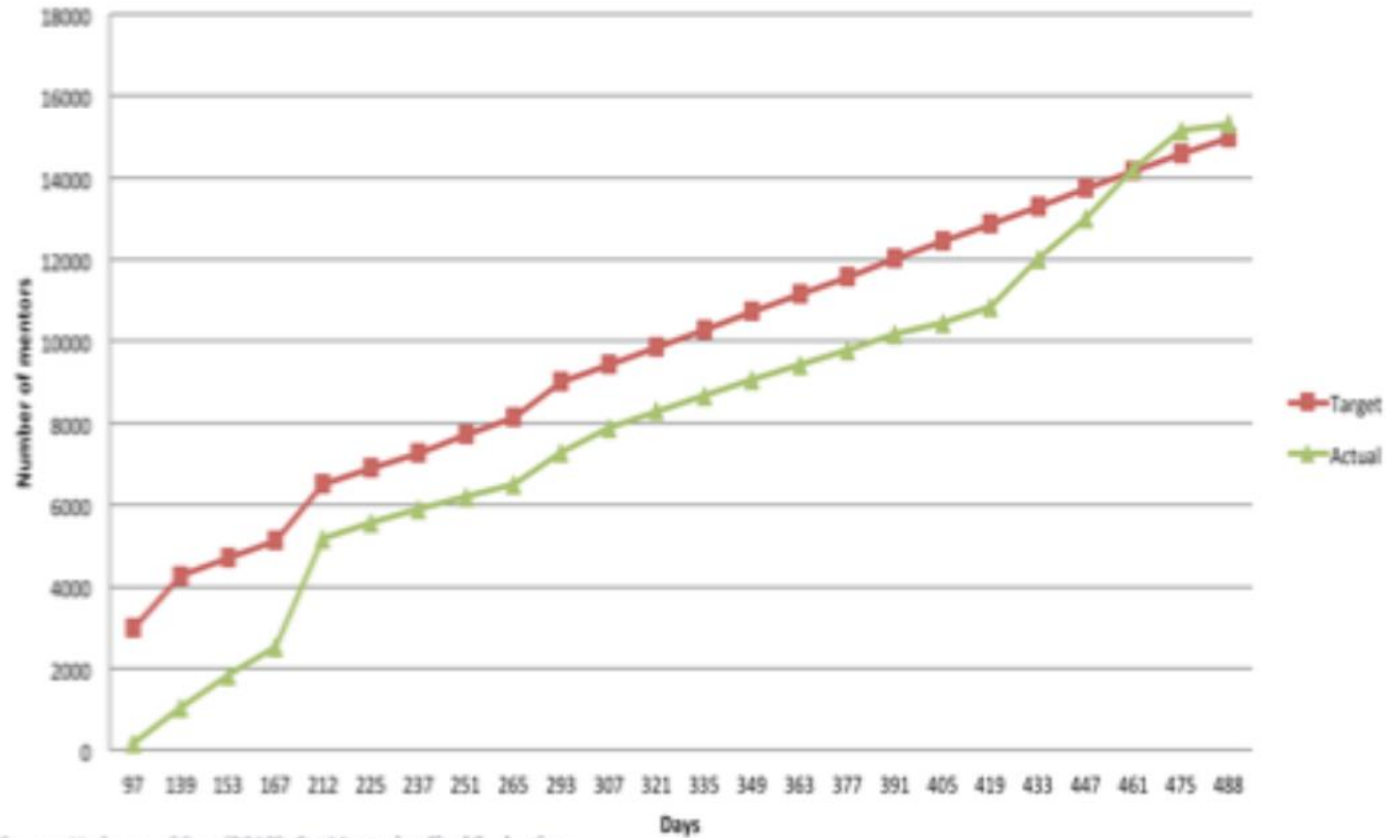
# Three ingredients for delivering good policy



# 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

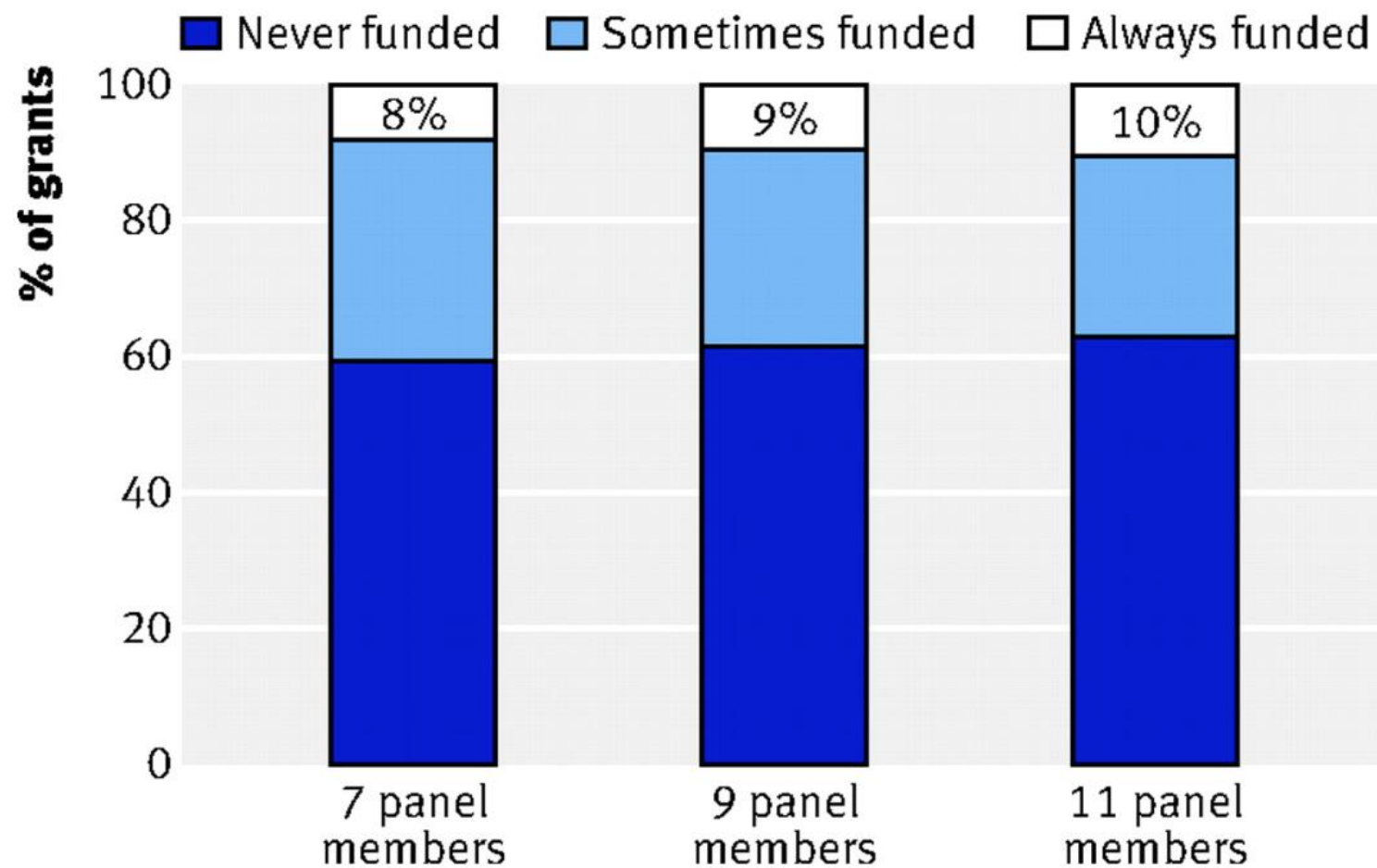
2018

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**

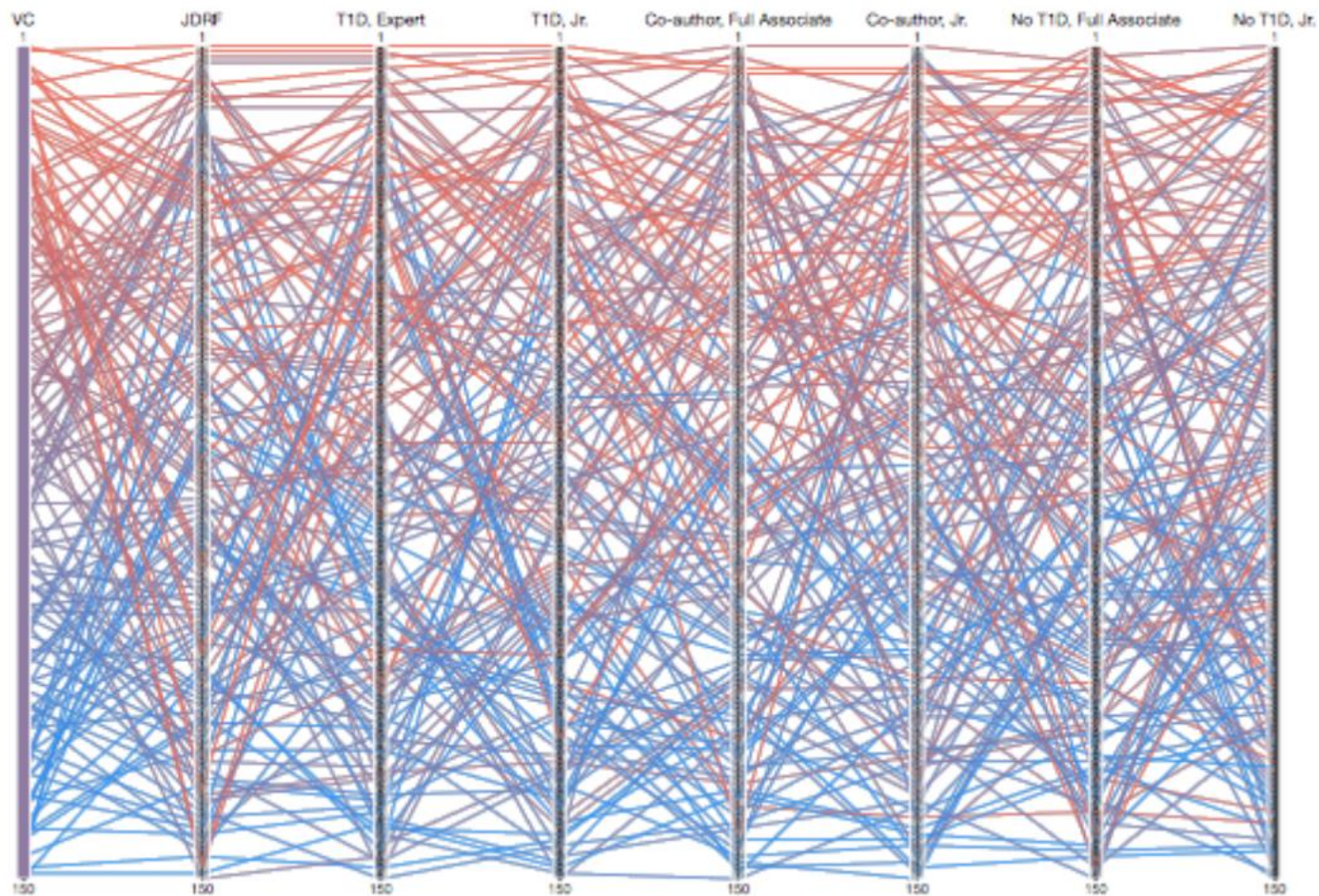
The European Commission launches a new **€4M call for innovation agencies to test new pilots using RCTs**

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



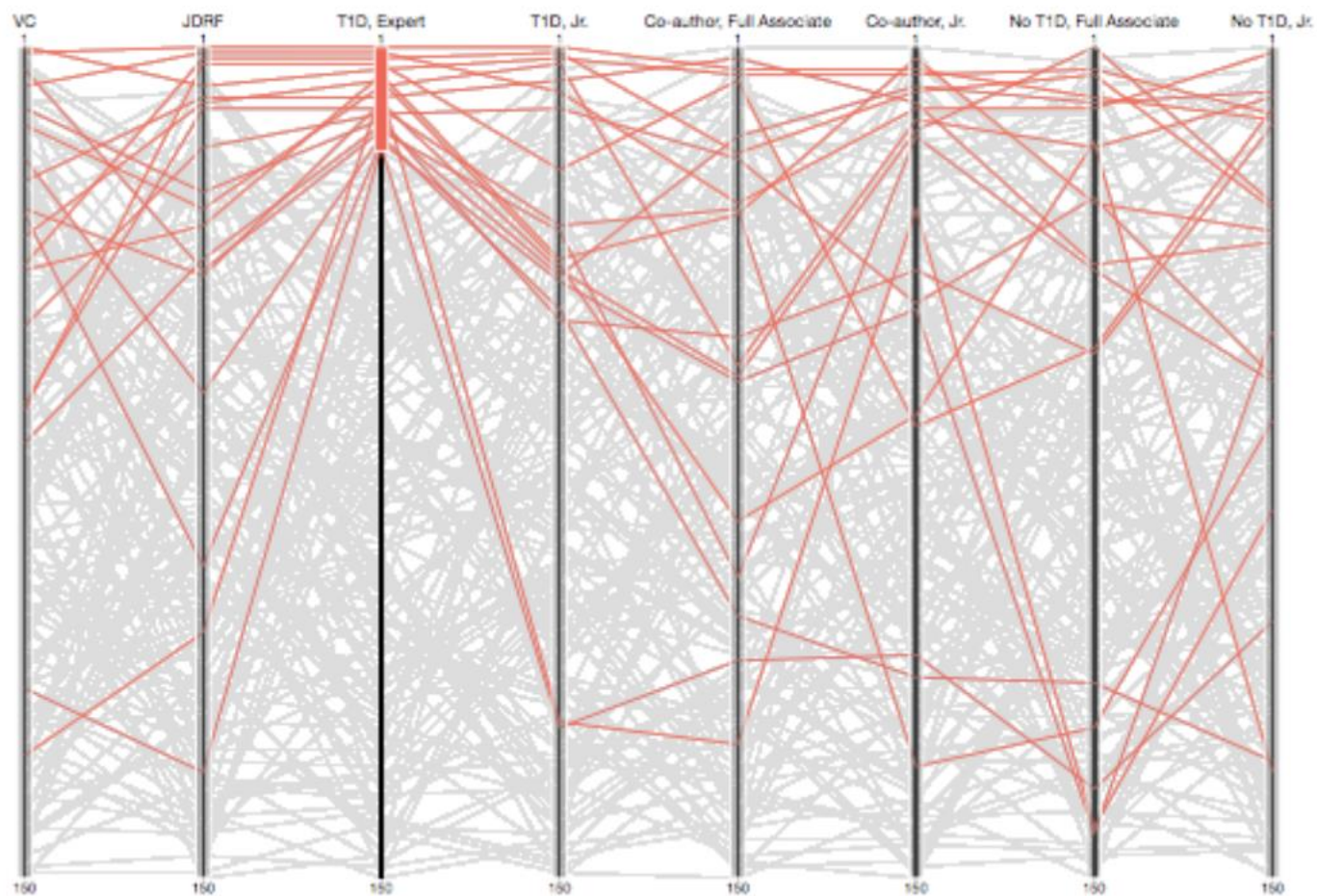
Source: Graves et al 2011, BMJ





Source: Boudreau et al 2016





Source: Boudreau et al 2016