

Using big data to understand ecosystems and policy impacts

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Innovation and Growth Lab
Global Summit

Berlin, 22 May 2019

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1. The innovation policy **data challenge**

We need new data for new innovation & growth policies

Mission: Use data, Artificial Intelligence and innovation to transform the prevention, early diagnosis and treatment of chronic diseases by 2030

How do we find AI?



We don't measure emergent technologies and industries

How do we track diffusion?



We don't capture connections between actors / across actors

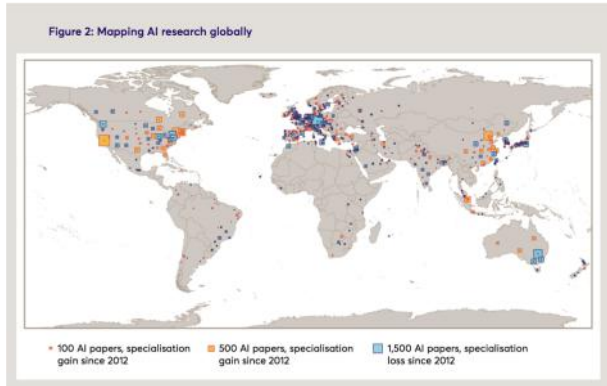
How do we enable collaboration?



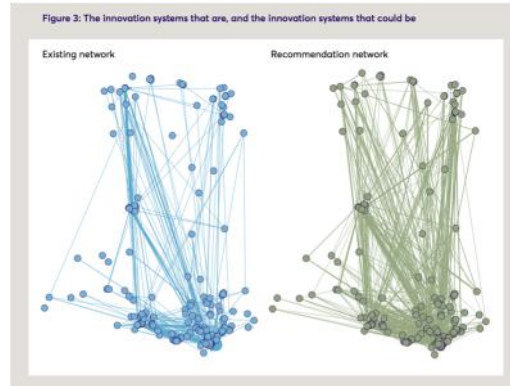
We don't make data available at the level resolution that many relevant stakeholders need

1. The innovation policy **data opportunity**

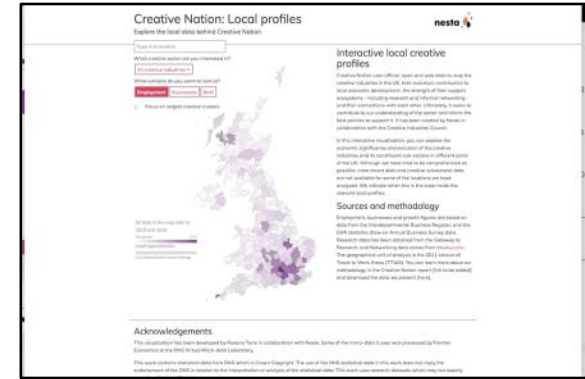
Novel data sources and methods could give us new, policy-relevant evidence for innovation & growth policy



Map and monitor emerging technologies



Analyse the structure of innovation systems

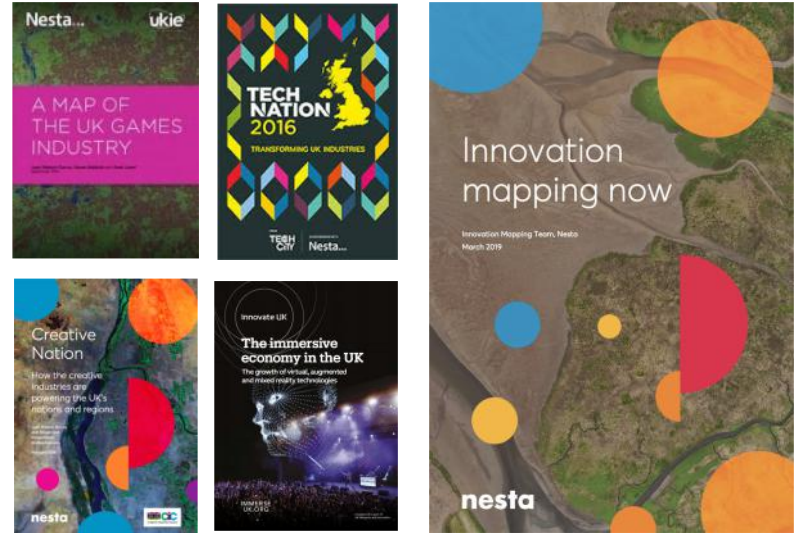


Release the data for anyone to analyse

But these novel methods also have risks: **biases, consistency, interpretability, policy relevance, ethical problems...**

Interdisciplinary team with a mission to **transform innovation policy with new sources of data and analytics methods.**

Develop tools, policy reports and recommendations, data, code and papers.



Robert Wood Johnson
Foundation

The Scottish
Government



MIX TAPE

Today's session

Show the value of novel data & methods across the policy cycle

Show the potential of creative combinations: **when older approaches and new ones come together.**

Discuss policy applications & pathways and hurdles to implementation

Agenda setting



Predictive analysis of **patent** breakthroughs

Monitoring



Combining web data & **innovation surveys** to map innovation

Impact evaluation



Using network science & **interviews** to measure funding impacts



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