Incubators, accelerators and urban economic development

Max Nathan

(With Margarida Madaleno, Henry Overman and Sevrin Waights)

max.nathan@ucl.ac.uk

@iammaxnathan

CLGU, 8 September 2021

The team

@MargNdAMadaleno @henryoverman @waights

Open Access paper: https://bit.ly/3naf0xp

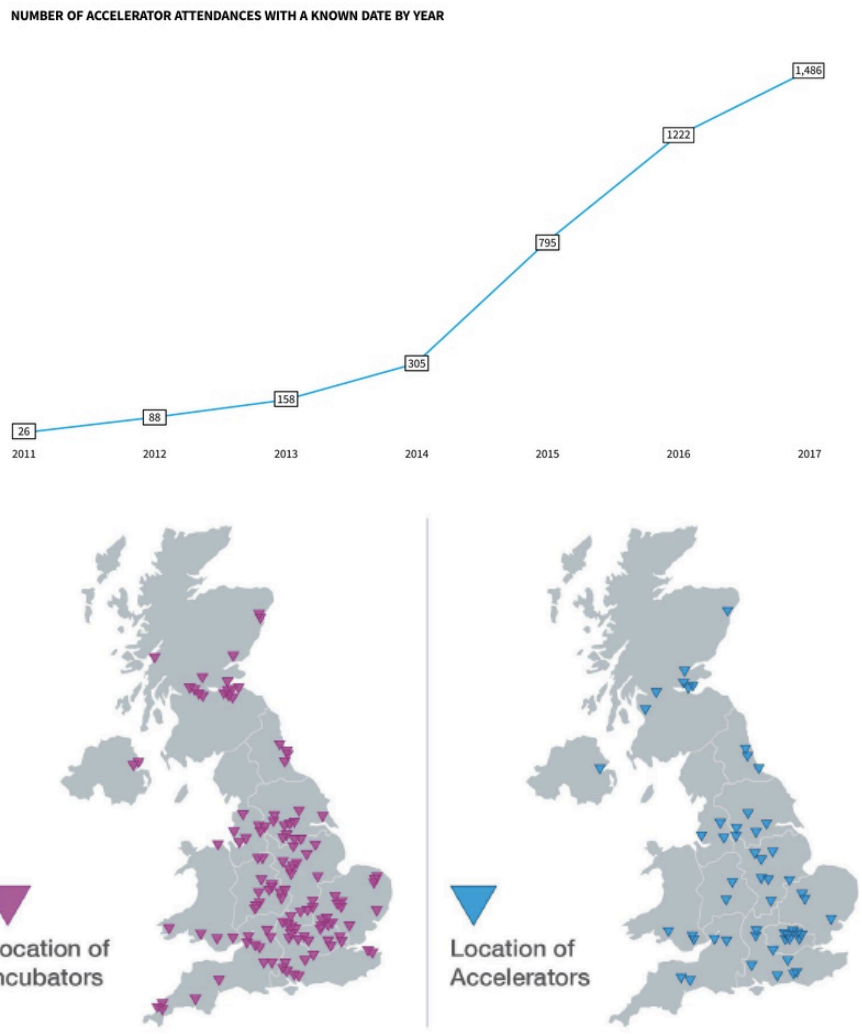
Our views, not those of the What Works Centre for Local Economic Growth

Overview

- **What we look at:** effectiveness of co-location tools for startups and SMEs, especially **incubators** and **accelerators**
- **Why this matters:** rapid growth in colocation-based programmes. Lots of exposure, policy support and public money. But little robust evaluation
- **What we do:** OECD-wide systematic reviews + interviews
- **What we find:** clear evidence programmes work, but less clear *how*. Policymakers should enable *and* evaluate!
- **I'll also say a bit about:** co-location programmes and clusters; co-location and hybrid / remote working

- **Co-location** => innovation and entrepreneurship
- Big debates about the role of **clusters** and **cluster policy**
- **What can *co-location programmes* do to help?**

- **Fast growth**: participation in accelerators has risen 78% per year since 2014
- **Uneven geography**: incubators evenly spread, especially in uni towns; accelerators urbanised, over 50% in London



Beauhurst (2018); Bone et al (2019)

Why should we care?

- **Providers make strong claims on programme impacts.** How well-founded are these?
  - The more selective your programme, the more likely firms who got in would have done well anyway

- **Programmes now get a lot of public support/ money**. Is this money well spent?
  - At least 13 countries support them as part of national innovation programmes (Audretsch et al 2020) [NB UK not on this list!]
  - Over half of UK programmes get at least some public money; on average £187k per year (Bone et al 2019)

- **What are the likely impacts of hybrid working?**

Typology of spaces

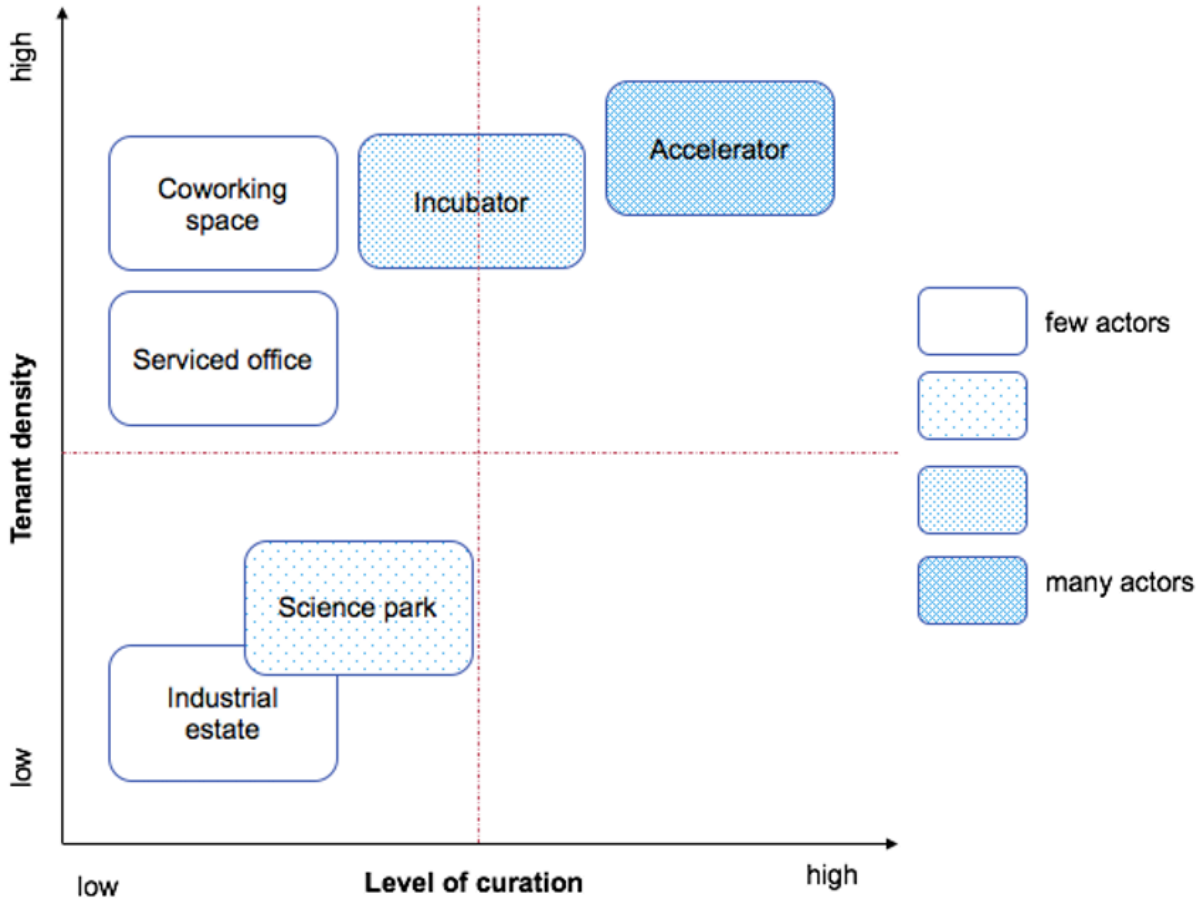
Table 1. Accelerators, incubators and co-working spaces.

	Accelerators	**Incubators**	**Co-working**
Duration	3 to 6 months	1 to 5 years	Open-ended
Cohorts	Yes	No	No
Business model	Investment; non profit	Rent or fees; non profit	Rent, non-profit
Selection	Selective; cohorts	Either selective or non-selective	Non-selective
Venture stage	Early	Early or late	Early or late
Education	Seminars	Ad hoc; human resources or legal support	None
Mentorship	Intense; by self and others	Minimal; tactical	None
Venture location	Usually on-site	On-site	On-site

Source: Expanded from Hathaway (2016).

NB Other business models exist! [more]

The bigger picture



Drivers of growth

- **More entrepreneurs: greater demand for information, advice and support**
  - Push: weaker macro conditions since 2007
  - Pull: costs of starting and running firms have fallen; growth of entrepreneurial lifestyles; both in tech and more broadly
  - Reaction: investors need tools to filter / develop investments
- **Competing demands for urban space**
  - Residential vs commercial in large post-industrial cities
  - Longer-term shifts to smaller / more network firms
  - Co-location programmes raise buildings' effective density
- Many providers run a mix of programmes

Cities in miniature?

- In theory, co-location programmes can provide **sharing, matching and learning effects – more intensively than 'on the street'**
  - Sharing: pooling space, facilities, broadband costs
  - Matching: finding partners, clients
  - Learning: knowledge spillovers
  - Downsides: poaching ideas / people

Typology of interventions

- **Co-working spaces**: unstructured co-location
  - Input-sharing happens, other gains may not
  - Just ‘a nice/cheap space to work’?
- **Incubators**: structured co-location
  - Pre-select participants, curate interactions
  - What’s the best mix of participants? How to optimise interactions?
- **Accelerators**: structured co-location plus intensive learning
  - Speed up, de-risk the entrepreneurial process
  - Competitive entry: selection as a quality signal
  - Q: how much of this requires physical proximity?

Methodology

- **Systematic reviews of impact evaluation evidence**:
  - Impact evaluation = what's the effect of policy X on outcome Y?
  - OECD-wide, no time limit, English-language
  - Focus on evaluations that are cross-section or before/after with controls, or better (Score ≥2 on the Scientific Maryland Scale)
  - **N = 14 [7 accelerators, 4 incubators, 3 both] ****
  - Sort results by outcomes; vote count; results in [square brackets]
  - Use SMS and wider lit to help interpretation
- **Operator interviews** in UK + Sweden (n = 8)

** We stop in 2018, so don't include Bone et al 2019. Closest comparator = Hausberg and Korreck 2020: 12 studies, no quality filtering; we'd only include five of these

Overall impacts for firms

- Accelerators and incubators help firms **raise employment** [5 accelerators, 2/2 pooled]

- Accelerators help firms **raise external finance** [4/5]

- **Mixed effects of accelerators on survival**: 1/5 positive, 1/5 zero, 2/5 negative. Programmes help founders drop bad ideas and start again
- **Mixed effects of incubators on survival**: 2/5 zero, 3/5 negative. Poor programme selection + management

Programme design

- **Programme mix:** inconclusive: overall complementarity vs. mentors and networking [6]
- **Industry mix:** not a factor for accelerators [2], for incubators, high-tech sectors benefit most [3]. More specialised programmes may help survival
- **Programme length:** not conclusive [5]
- **Provider type:** not conclusive, but not obvious private sector > public sector-run [7]

Ecosystem / groups

- **Uni involvement:** for incubators, helps firm survival but mixed effect on other outcomes [4]
- **Ecosystem:** dense ecosystems complement accelerators but don't help firms in incubators [2]

- **Non-profit provision** can help survival for female-headed firms [1]. **Accelerators have positive impacts** on female and BAME-headed firms' survival [1]

- Accelerators appear to **help firms in the wider ecosystem raise finance** [1]. No evidence of displacement

Summing up (1)

- Fairly clear evidence that programmes work overall – for participant survival, employment, financing
- Programmes may also help ‘non-typical’ firms
- Surroundings seem to matter – universities, wider ecosystem – with some evidence of spillover effects to the wider area

- Less clear *how* programmes work – mechanisms remain poorly understood …
- … as do incubators vs accelerators vs co-working

Summing up (2)

- **No obvious 'public sector penalty'** to programme involvement
- **Implies two overall roles for central/local policymakers**
  - Provide / enable programmes
  - Help test their effectiveness, especially design features and horse-racing different programme types
- Especially important given cost differences between co-working, incubators and accelerators
- **Who can help**: WWC Growth, NESTA Innovation Growth Lab

Wild speculation

- **Clusters**: rising productivity vs. rising costs
- Could co-location programmes steepen the productivity curve and flatten the cost curve?
- *Q: how many programmes would we need? How big?*

- **Hybrid working**: heavy use of flexible / drop-in spaces
- Co-location programmes could benefit from this, especially if firms minimise / give up permanent office space
- Broader importance of co-location for innovation and entrepreneurship – aka 'cities' (Nathan and Overman 2020)
- *Q: hybrid programmes? Online workarounds for F2F?*

Thanks!

max.nathan@ucl.ac.uk
@iammaxnathan

CLGU, 8 September 2021

Appendix

back

Appendix: other business models

- **Club spaces [Second Home, The Ned]** – members clubs 2.0; emphasis on networking/events > primary workspace
- **Fablabs / Makerspaces** – hardware / manufacturing focus; input-sharing plus ‘maker’ identity
- **Corporate accelerators** – platforms connecting SMEs with a single large firm, often an MNE
  - Drivers for big firm: open innovation, supplier / value chain optimisation; acquire competitors?
  - Drivers for SME: cashflow, big client, inernationalisation, gains knowledge of industry standard systems, norms