

in brief...

Swings and silicon roundabouts: does cluster policy work?

Despite scepticism among researchers, policies to promote geographical clusters of firms in the same sector remain popular. **Max Nathan** evaluates a flagship programme set up a decade ago to accelerate the growth of Tech City in East London. While the cluster has increased in size and density, the outcomes for firm performance are – at best – mixed. That raises some bigger questions for future cluster policies.

London's technology ecosystem is thriving. The city has over 50,000 tech firms, with over 260,000 employees. Venture capital investment rose from £384 million in 2013 to £1.8 billion in 2018. A number of companies, such as Darktrace, Transferwise and Deliveroo, have become unicorns – valued at more than £1 billion. The sector survived the financial crisis and is – so far – largely Brexit-proof.

East London is an important part of this story. Since the late 1990s, the neighbourhoods around Shoreditch have become home to a rich tech community, especially digital content firms that bridge to traditional media, advertising, marketing and design.

The cluster's growth went under the radar until, in 2008, Silicon Roundabout caught the media's attention. In late 2010, policy-makers stepped in: then prime minister David Cameron launched East London Tech City, a flagship cluster acceleration programme. The policy mixed marketing and place branding; foreign investment; business support; network-making; tax breaks; and a one-stop delivery body – the Tech City Investment Organisation.

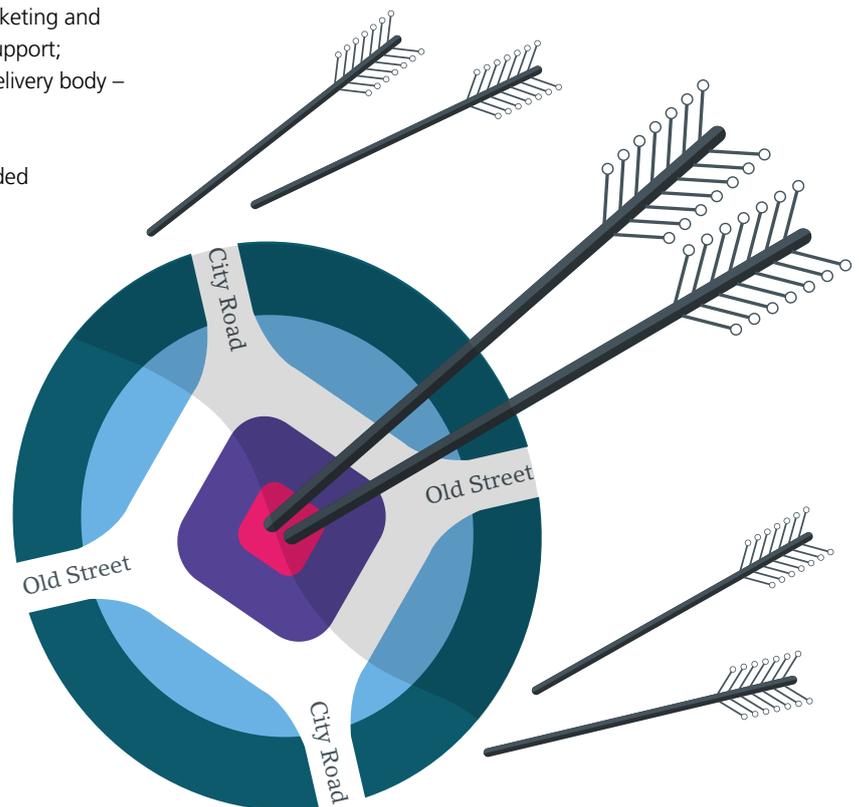
The consensus is that these interventions – lauded by, among others, Boris Johnson in his time as London's mayor – have been hugely successful. Rebranded as Tech Nation, the programme now covers the whole UK. But

until now, no one has actually tested what happened on the ground. My recent study plugs that gap.

There are many reasons to care about this, even if you're not a Londoner. First, lots of cities worldwide have tech clusters like this – Manchester, Leeds, New York, San Francisco, Stockholm, Berlin and Tel Aviv. Can they learn from London's experience?

Second, cluster policy is contentious. Policy-makers love them: but many researchers are deeply sceptical of whether they achieve anything. Who is right? It turns out that while there are hundreds of academic papers on clusters, very few actually try to evaluate the effects of cluster policies. Here is a gap we need to fill.

While the Tech City cluster of firms has become bigger and denser since 2010, there are clear winners and losers



Third, the Tech City policy is potentially very attractive to policy-makers. Very simply, there are three families of cluster policy. One group involves formalised national partnerships, as used in France and Japan; a second group covers city re-zoning and rebuilding, as in Barcelona's 22@ district. A third group uses Michael Porter-style 'light touch' programmes: Tech City is in this third group. It tries to 'go with the grain' of the local ecosystem, rather than reshaping the area through large-scale physical development, or using industry membership models. Does this bottom-up, light touch approach work any better than previous top-down approaches?

In my research I think of the cluster as a 1km zone around Old Street roundabout: that's how most people saw it in 2010, when the policy arrived.

I start by looking at long-term trends in the area. Clusters are governed by positive and negative feedback loops. As they get bigger and denser, the exchange of people and ideas between firms boosts productivity. But bigger and denser also means more expense and competition. This pushes some companies out of the market or out of the neighbourhood. In Shoreditch, both positive and negative effects were in evidence: the cluster got bigger and more expensive.

Working out how much of this was down to policy interventions is especially tricky in this case. Shoreditch is an unusual neighbourhood, and it's hard to find like-for-like comparisons elsewhere in London.

So instead, I compare changes in Shoreditch to a 'synthetic Shoreditch', modelled using data adapted from London tech hotspots beyond Tech City. This simulated cluster looks very like the real Shoreditch before the Tech City programme began, but after 2010 it follows its own path, in a parallel world where the policy didn't happen.

Overall, I find that the policy increased the size and density of the cluster, both for the digital content firms and a newer wave of smaller, younger digital tech firms specialising in hardware, software and information technology. But this seems not to have consistently increased firm performance, with only the established digital content firms seeing higher revenue per worker.

Why hasn't a bigger, denser cluster raised performance for everyone? Cluster disruption might provide part of the answer – digital tech firms crowded into the heart of the area, and content businesses moved to its edges. Growth is also driven by new entrants, mainly UK-owned, raising levels of competition and driving down revenue per worker for the average firm.

More troublingly, I find that much of this began before 2010, when the Tech City programme began, and then weakened relative to the two years preceding it. The policy seemed to amplify the benefits of clustering for the larger,

Only the established digital content firms have seen higher revenue per worker; for younger digital tech firms, performance has fallen

more established content firms. But for smaller, younger digital tech firms, performance fell after 2010. Here, the policy overheated the ecosystem.

So did the policy work? Sure, if a bigger cluster is all that matters. But if you also want a better cluster, the results are much more mixed, with clear winners and losers.

A pessimist might say that this shows that trying to steer a cluster's course is pointless. On the other hand, Tech City shows that government can influence change without dropping huge amounts of public money.

While trade-offs are probably inevitable, a better thought-through programme, with clear objectives linked to specific policy actions might have delivered a better balance of positives and negatives.

Light touch approaches may work for established clusters, but they are less likely to succeed in growing one from scratch. Other cities will also want to vary the policy mix, for example, by placing more emphasis on infrastructure or less on branding. It will be fascinating to see how future cluster policy experiments, such as London's Med City and Manchester's Graphene City, play out.

More broadly, there are lessons here for the 'levelling up' agenda, especially the current government's plans to jump-start regional economies and move large institutions out of London.

This article summarises 'Does Light Touch Cluster Policy Work? Evaluating the Tech City Programme' by Max Nathan, CEP Discussion Paper No. 1648 (<http://cep.lse.ac.uk/pubs/download/dp1648.pdf>).

Max Nathan of University College London is a research associate in CEP's urban and spatial programme, and a deputy director of the What Works Centre for Local Economic Growth.