



The MIT of the North? Building an innovation- driven economy.

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September 2019

The following Think Piece has been submitted to the UK2070 Commission in response to its Call for Evidence. The views expressed are those of the author, and not the Commission.

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At a time of rapid economic and technological change, the places that will be successful in the knowledge economy are those that can create and commercialise innovation. The opportunity is to spin out and diffuse research and knowledge from universities and other knowledge intensive anchor institutions (such as teaching hospitals or major cultural bodies). By doing so places can support the start-up and scaling-up of more of the fast-growing, innovation-driven, high-export firms that are so important to more rapid productivity growth.

One of the causes of the relative economic underperformance of many of the UK's cities and city regions outside the London-Oxford-Cambridge "Golden Triangle" is that, despite having strong universities and some real success stories, they have yet to build an innovation-led-economy with sufficient strength, coherence and critical mass.

Greater Boston, Massachusetts has built one of the world's most dynamic and successful economies based on innovation, anchored by the Massachusetts Institute of Technology (MIT) and other world class universities. The UK2070 Commission has set out a vision to build a "MIT of the North" to build on the strong base of universities in the north of England.

Why is the Greater Boston economy so successful and how does MIT act as such a significant economic catalyst? There are lessons for all parts of the UK.

MIT, through their [Regional Entrepreneurship Acceleration Programme \(REAP\)](#) framework, have identified the components of a successful ecosystem for innovation-led growth. A strong base of research intensive universities is important. There needs to be sufficient number of entrepreneurs with the right skills and culture (and MIT believe strongly entrepreneurship can be taught) to spin-out, start and scale up innovative firms. A strong group of corporates undertaking innovation and supporting and advising smaller firms is necessary. The availability of risk capital and the engagement of angel investors (who provide mentoring, advice as well as finance) to entrepreneurs is a major factor. Government (local and national) has a major role to play in creating the right policy frameworks, infrastructure, and data. Finally, these actors need to work together to ensure there is the right engagement and support between the actors to create a successful ecosystem that is more than the sum of its constituent parts.

THERE ARE FOUR IMPORTANT IMPLICATIONS HERE FOR UK CITIES AND REGIONS.

First, a place-based approach is important.

The MIT story demonstrates the importance of the components for an innovation coming together in a place. The modern economy relies on intangible assets and networks such as knowledge, research and development, creativity, software, data, and talent. Interconnected industries a growing feature with the boundaries between sectors such as finance, digital, services, design, engineering, health and so on becoming increasingly blurred. This means that knowledge-spillovers between them are critical to economic competitiveness of places. The scale and density of these knowledge transfers can be maximised in cities and connected districts which can support a critical mass and high densities of face-to-face contacts between knowledge intensive firms, workers, and institutions. Firms value urban locations with to a wide pool of skilled and creative workers. However, most policy and funding decisions for innovation in the UK are taken at national level and in silos relating to specific sectors. There is a need to build on the Local Industrial Strategies to move to a more place-based approach with greater devolution of funding.

Second, innovation districts are emerging as economic powerhouses in city centres

and hyper-connected urban districts are the places that can help UK cities create, scale-up and attract the fast-growing firms, new products and processes which will drive more productive and inclusive economic growth. The geography of innovation and the economy is changing. Knowledge intensive jobs are moving back into urban area areas where skilled and creative workers, innovative firms, researchers from universities and other institutions, healthcare clinicians, investors and entrepreneurs are sharing knowledge and ideas in collaborative spaces and networks. Cities, universities and other anchor institutions for innovation are seeking to support and capitalise on this trend through bold investments to create new campuses, business space, and public realm. These are the science parks of the 21st century, regeneration hotspots, magnets for inward investment, and places that can change our economy. It is important that the UK supports this development of innovation districts with more investment.

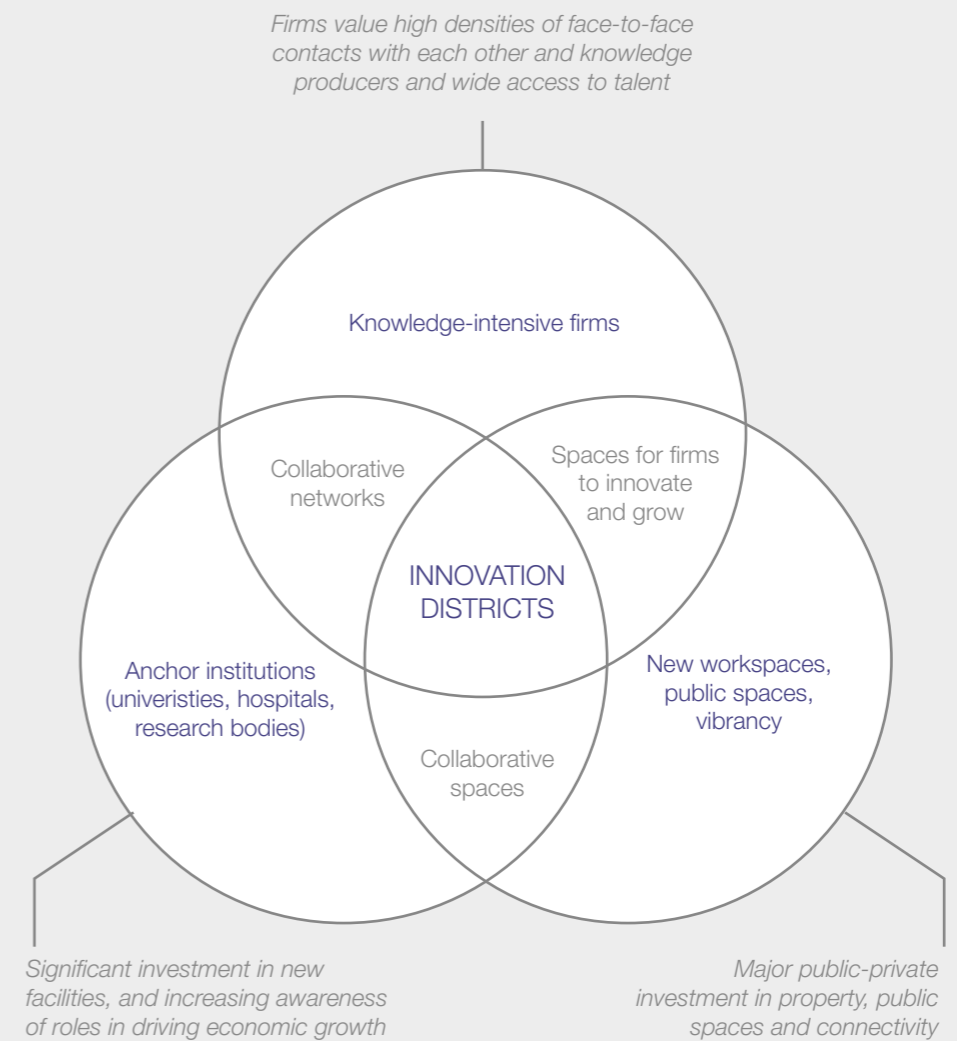


FIGURE 2
Main features of UK Innovation Districts

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Third, there needs to be a stronger focus on building the networks for collaboration

to develop more successful innovation-driven entrepreneurial ecosystems. This includes creating accelerator programmes to ensure entrepreneurs can access the research, mentoring and advice to commercialise ideas (or fail fast), and the investment, markets and premises they need to succeed.

There is scope to build on the work of the [Scale-Up Institute](#) to provide more support to fast-growing scale-up firms. In some places there is a need to improve access to risk capital through initiatives such as [NorthInvest](#) which is building a network of angel investors and connecting them to start-ups.

Universities are increasingly considering how they can play a stronger positive catalytic role in growing the economy as part of a wider civic role as explored by the [Civic University Commission](#). This could include increasing entrepreneurial education and staff and student entrepreneurship and industry collaboration. Firms respond to future profit, market and growth opportunities where there is societal need. There is potential for places to stimulate and bring together innovation activity around missions, aimed at solving societal challenges, as recommended by the UCL Commission for a [Mission-orientated Approach to Industrial Strategy](#).

Fourth, we need to tackle the significant regional imbalances in Research and Development (R&D) funding

as part of the Government's aim to increase R&D investment to 2.4% of GDP. [Tom Forth](#) has identified the role public sector R&D investment has in stimulating private sector R&D activity, highlighting the regional disparities in this investment.

As Roger Marsh, Chair of the [NP11 group of Local Enterprise Partnerships](#) said recently, creating ideas costs money, innovation makes money. It is only by commercialising those ideas that we can create wealth. We need more places in the UK to build strong innovation-driven and entrepreneurial economies. That will require a place-based approach, more support for the development of innovation districts, a stronger focus on building the networks for collaboration between innovators, entrepreneurs and other actors in the ecosystem, and it needs a concerted effort to increase R&D investment and tackle the imbalances in R&D spend across different points of the UK.

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