

What makes a successful innovation district?

Being seen as a tech or creative hub or having an innovation district is the new badge of honour for cities. Get it right and the economy grows, new businesses spring up, and the rise in living standards puts the city on the map. Get it wrong and gentrification can push residents out and entrepreneurs will choose to set up elsewhere. **Kirsty Tuxford** highlights how cities can develop successful districts for innovation



Athens was made the 2018 European Capital of Innovation for the revitalisation of communities such as the Commercial Triangle (Trigono)

Athens Trigono is a programme of the City of Athens, coordinated by the Athens Partnership, based on an exclusive grant from the Stavros Niarchos Foundation

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The announcement that Athens had been made European Capital of Innovation by the European Commission in 2018 marked a welcome upturn in the Greek capital's fortunes. The years after 2011 had been a struggle, with high unemployment and strict austerity measures imposed by the EU, culminating in riots in the city. But in 2018, unemployment dropped below 20 percent for the first time in seven years, and Athens ended the year ironically as a champion of innovation in the eyes of the EU.

"Through innovation, Athens found a new purpose to turn around the economic and social crisis," says Carlos Moedas, Commissioner for Research, Science and Innovation, at the European Commission. "It is proof that it's not the difficulties but how you raise yourself above them that matters."

It is also proof of the value of innovation policies in driving economic and social change within cities. Some cities have set out to purposefully develop innovation districts, which serve as engines of economic growth while others have looked to develop an eco-system or set of municipal partnerships to stimulate regeneration and drive innovation.

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Julie Wagner
 President, Urban Insight
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"Innovation districts are a locally designed innovation strategy that often begins through the visionary leadership of a mayor, the ambition of a university or hospital president, or the collective drive of a group of local leaders willing to unite around a common geography," says Julie Wagner, President, Urban Insight, and author with Bruce Katz of several leading papers on innovation districts.

Athens itself has not developed an innovation district but it was recognised by the European Commission because it has focused on engaging citizens in an innovative way to drive regeneration.

"With the European Capital of Innovation, we reward the cities that go the extra mile to test new ideas, technologies and ways to make citizens heard in the way their city is changed," says Moedas.

Projects in the Greek capital included POLIS for revitalising abandoned buildings; the renovation of the Kypseli Public Market in a 90-year-old historic building, which now also hosts art and cultural events; creating a community playground called

Serafeio, which is now home to the Athens Digital Lab; the formation of a digital council by private companies and educational institutions to provide technology training; and the *This Is Athens* campaign which gives volunteers a platform to talk about the city's past and present to the five million tourists that visit each year.

“My favourite project is Polis Square, where co-creation with citizens forms the basis of a set of well-integrated initiatives aiming to revive abandoned parts of the city centre,” says one of the team of judges who voted to award Athens the innovation title. “It goes far beyond the boundaries of traditional governance models, does not require extensive financial resources, could be easily replicated and adapted, and can be geographically extended in its scope.”

The move towards innovation districts

As Athens shows, innovation districts are not a pre-requisite for cities to become increasingly innovative and competitive but cities are keen to claim such credentials as they seek to compete for investment.

It is important to understand what drives the formation of innovation districts because given the nature of their businesses, emerging and big tech companies are able to site their facilities outside traditional industrial heartlands and in the heart of cities and cities clearly want to get a piece of that investment. In addition, innovation districts are having profound effects on regeneration and the availability of affordable housing as more millennials choose to live and work in cities.

Brookings, a research institute, defines innovation districts as

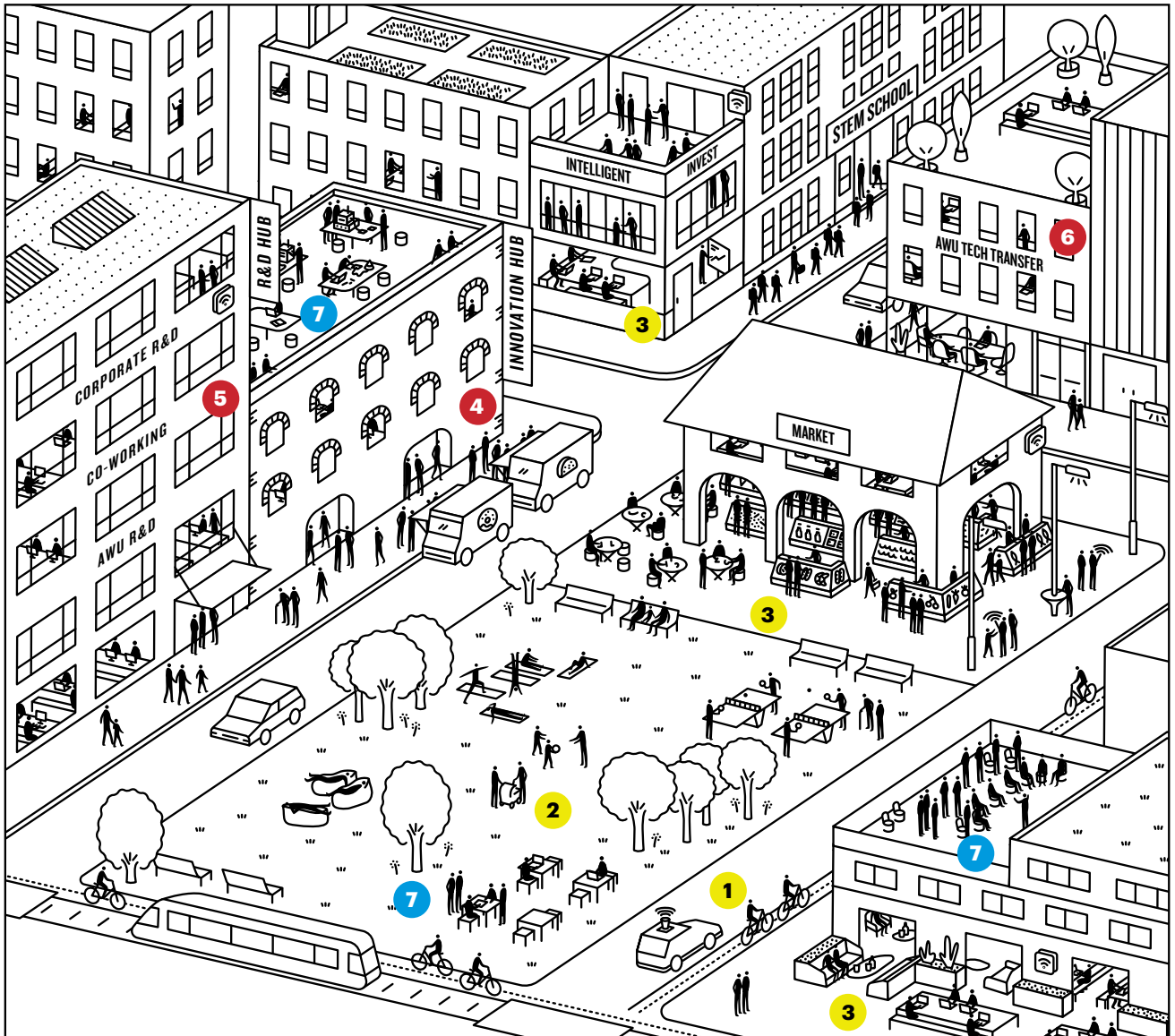
The first examples were in Boston and Barcelona, which spurred mayors worldwide to replicate variations of the model in their own cities – today there are more than 80 recognised innovation districts globally

geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators. Such districts are physically compact, transit-accessible, technically wired and offer mixed-use housing, office and retail. Rather than

focus on discrete industries, innovation districts represent an intentional effort to create new products, technologies and market solutions through the convergence of disparate sectors and specialisations – for example, information technology combining with bioscience, energy, or education. They can also focus on culture, food or other industries. If orchestrated correctly, they grow tax or business

Bruce Katz
co-founder and director, Nowak Metro
Finance Lab, Drexel University
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This illustration depicts the concentration of economic, physical, and networking assets within one node of an innovation district—the size of a full city block. While a district commonly ranges in size between 300 acres and 1,000 acres, creating a critical mass at specific nodes or a key corridor, which then extends over time and space, is proving to be a smart and successful strategy.

Physical Assets

- 1 A walkable street grid provides the backbone of the innovation district—strengthening connections between people and firms.
- 2 Public spaces are designed and managed to spur interaction, learning and networking.
- 3 Ground floors of buildings are activated with coffee shops, cafes, and gathering places—wired, comfortable, and inviting.

Economic Assets

- 4 A mix of institutional, company, and start-up spaces are concentrated in close proximity—including affordable workspaces.
- 5 Major research facilities of large companies are also located near firms and institutions to help “crack the code” on new innovation.
- 6 Tech transfer offices, to support commercialization, are located where people and firms are innovating—not tucked away on a university campus.

Networking Assets

- 7 Programming—to incubate new enterprises, accelerate learning, and strengthen networks between people and firms—permeates across private innovation spaces and public spaces.

Opposite: Handbook illustration reproduced from *Advancing a new wave of urban competitiveness: The role of mayors in the rise of innovation districts* (June 2017)

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rate revenues for cities and raise the value of municipal land.

The first examples were in Boston and Barcelona, which spurred mayors worldwide to replicate variations of the model in their own cities – today there are more than 80 recognised innovation districts globally. Both cities developed their innovation districts from a vision set out by their respective mayors at the time. In 2010, Boston Mayor Thomas Menino made a speech, championing the redevelopment of the Seaport district, and following the staging of the Olympics in 1992, Mayor Joan Clos of Barcelona expressed the need to strengthen the city's competitive advantage through the regeneration of the Poblenou district into a branded innovation district called 22@Barcelona.

“Boston has enormous transit connectivity and it had a lot of vacant land when the freeway was demolished it opened up the sea port,” says Bruce Katz, distinguished visiting fellow in the Lindy Institute for Urban Innovation and director of Drexel's Nowak Metro Finance Lab. “So, government can in certain markets and in certain conditions, accelerate the growth of innovation districts, but it has to be done very carefully, in concert with the innovative sectors – it just can't be the public sector declaring something – that's usually a recipe for disaster.”

Many innovation districts are market-led and grow spontaneously from the bottom-up, whereas

Boston and Barcelona were the brainchild of the municipality.

Katz feels it is not always that black and white. “I think the most successful innovation districts grow organically and they have a mix of public, private, civic and university leadership, so, in the US, most districts evolve because of multi-sector leadership. The public, private, civic and university sectors in most cities collaborate all the time.”

As a result, US cities are more like networks than governments.

“I think in Europe, and most of the world, when you say the word ‘city’ most people think you're talking about the city government,”

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observes Katz. “When you say the word ‘city’ in the US most people think you're just talking about networks. A real big difference.”

The Barcelona plan was approved in 2000. At the time, the Poblenou (meaning “New village”) district consisted of derelict industrial land spanning 200 hectares. The government invested €180 million so that abandoned, obsolete factories and warehouses could be incorporated into a new compact zone, comprising innovative companies, research, training and tech transfer centres, as well as housing (4,000 new subsidised residences) and green areas (114,000m²). The neighbourhood's industrial heritage was preserved thanks to the Industrial Heritage Protection Plan, written jointly by 22@Barcelona and the Barcelona City Council,

which conserves 114 elements of architectural interest.

The project was widely hailed as a success, but local government continues to carefully manage its development. “Barcelona City Council has carried out a participatory process and a technical one, in parallel, in order to rethink 22@ 18 years after its approval,” explains Lluís Gómez, Commissioner for Economic Promotion, Innovation and Enterprise at 22@. “The most noteworthy element is the incorporation of the neighbourhood in the governing body of the project, according to a model of quadruple helix – neighbourhood, business, academic and public sectors – in order to find a mixture of uses balanced between economic activity and the right to housing, heritage and so on.”

The most up-to-date evaluation of the impact of 22@ shows that there is a younger resident population of almost 114,000 people, seven percent of the city, who tend to be on lower incomes. There are 3,500 companies, most of them in the most developed southern zone, and more than 96,000 workers.

The influx of lower-income residents into the area means the city must ensure that affordable housing is available. “The fight against global phenomena such as gentrification, through a housing policy with some regime of public protection, and the articulation of a cultural axis around Pere IV street are priorities of the pact ‘Towards a Poblenou with a more inclusive and sustainable 22@’,” says Gómez.

“Affordable housing – integrated into market rate housing – is a core piece of this story as innovation districts are as much about inclusive, open neighbourhoods as they are engines of innovative growth,” adds Wagner.



The Poblenou area of Barcelona is recognised as a successful model of an innovation district with buildings refitted from its industrial past

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The key ingredients

To be successful, an innovation district needs economic assets, physical assets, and networking assets. Innovation districts reach their potential when all three types of assets, combined with a supportive, risk-taking culture, are fully developed, creating an innovation ecosystem. Universities are drivers for innovation districts; for this reason, many districts that did

not originally include universities have convinced universities to build satellite campuses.

“What happens in a lot of cities is that places—local leadership or private developers—just declare they have an innovation district and they usually skip past the fact that you need a strong economic platform,” says Katz. “In the US that platform tends to be advanced

research institutions, usually universities – that’s the starting point for innovation districts in the United States – not exclusively, but primarily. And around that you can build quality places and provide the kind of intermediaries to allow networking and programming to happen on a regular basis.”

The mayor should function as a champion, catalyst and a

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convenor in the development of an innovation district.

“The most important thing a mayor can do initially is to use their soft power to convene different stakeholders,” says Katz. “Let’s say you have a concentration of economic assets in your city but it’s not having its full economic or fiscal potential, which is where American innovation districts were 10 years ago. A mayor could bring together the heads of universities, hospitals and corporations, investors, and say, ‘How do we begin to pull this together in a way where two plus two equals five?’”

Wagner also references the city government’s hard power role – for example on zoning and land use – which will vary from city to city depending on the legal framework.

“The mayor is the chief spokesperson for the city – conveying the district’s distinctive assets to potential investors and companies outside the region but they can also reform regulations or reimagine government properties as a means to unlock a district’s real potential,” explains Wagner.

Which cities are getting it right?

Brookings’ research has shown that an innovation district is successful when a collaborative leadership network is built, which has a shared vision for growth and a goal of pursuing talent and technology. Districts must have strategies to enhance access to capital, and actively promote inclusive growth.

Katz cites Philadelphia as a good model. “Philadelphia is the best model of a civically engaged university – that’s Drexel – then there’s a special skills initiative run by the anchor institution, the eds and the meds, the university, the hospitals – to customise skills training for local residents,”

says Katz. “So there’s a direct pipeline and a direct connection between innovation and inclusion in this city. Is it perfect? No. Is there still a lot of concern about gentrification? Absolutely. But this is a city of 130 square miles and the university district is 1 to 1.5 square miles – it’s a pinpoint.”

But how do cities measure their success? Wagner explains that some districts are measuring their positive impact by job growth. 22@Barcelona identified total job growth and then broke down that job growth by type: growth in the innovation sector, in support services, and in retail and

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restaurants. “I like this because it helps identify how many jobs are squarely within innovation versus the sectors that grow as a result,” she says.

Other ways of measuring success include tracking the amount of people that have undergone training related to the industries within the innovation district; looking at the amount of space taken by new development, including amounts for start-ups, affordable housing and mixed-income housing; and looking at the number of programmes and network events organised to create an innovation ecosystem.

“Other cities keep track of the number of new start-ups and some track survival rates of start-ups after three or five years,” says Wagner.

And the scale of inclusion will inform any metrics evaluating the success of innovation districts as innovation districts offer the prospect of expanding employment and educational opportunities for disadvantaged populations given that many districts are close to low- and moderate-income neighbourhoods. The success of innovation districts going forward will increasingly be measured by their ability to upgrade the education and skills of local residents by investing in cradle-to-career initiatives.

“Some of the leading innovation districts have stressed the importance of valuing inclusion as much as innovation—creating an integrated strategy right from the start,” says Wagner. “In Barcelona, that district’s focus on affordable housing percentages set an important bar for others to follow. In Philadelphia, the focus on connecting communities to training and employment opportunities within an innovation district is a model to be emulated. In St. Louis, the work in designing a STEM-oriented school and linking that school to industry partners is helping students aspire to new heights.”

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“The bottom line for the United States and for our cities, is that the rise of innovation districts has been a huge positive dynamic because of the withdrawal of federal state governments as reliable and functional partners,” says Katz. “[When] you’re on your own, you’ve got to grow your own fiscal base.”