

Connect. Spark. Accelerate.

Connected Places
Catapult is the UK's
innovation accelerator
for cities, transport and
places.

We connect local place leaders to the innovation economy, sparking new partnerships and accelerating applications which eliminate carbon and drive prosperity.



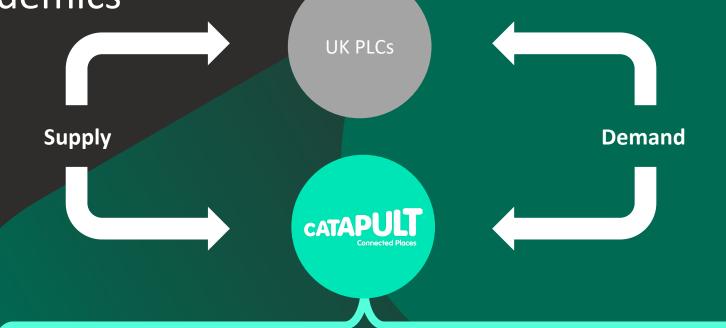
We connect innovation-hungry place leaders to innovation-rich

UK businesses and academics

As part of the UK Catapult Network, Connected Places Catapult exists to maximise the productivity and global competitiveness of key UK industries through applied innovation.

Interventions include:

- Boosting demand for innovation
- Increasing supply of proven products and services that meet market demand
- Fostering new markets
- Dismantling trade barriers













Market analysis



Human-centred design



Place-based expertise

We are helping placemakers develop hubs of innovation

We are providing policy- and place-makers with the insights, tools, and support needed to develop hubs of innovation :



150 collaborative projects every year with cities and towns



Partnerships with leading UK networks e.g. IDG



A network of 2500+ SMEs across the UK

We are incubating new and expanded national offerings, for example:

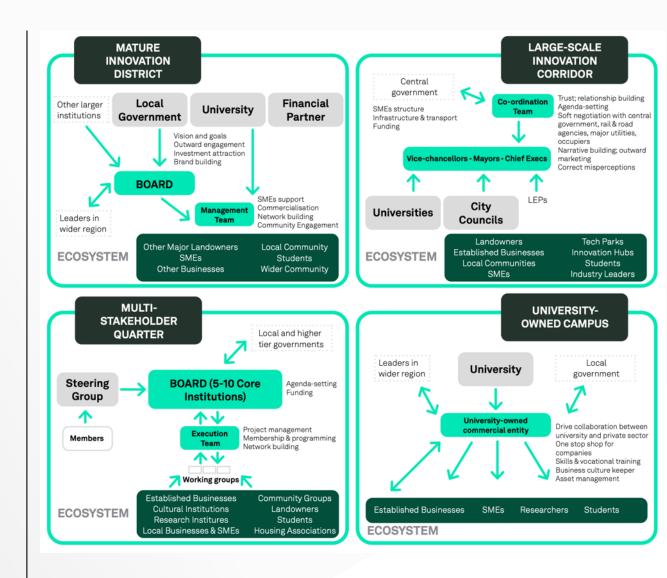






What is an 'innovation place'?

Examples of types of innovation hubs, and the ecosystems surrounding them



Opportunities

A strategy that drives a local 'innovation economy' can provide outsized and long-term benefits for place leaders.

- Innovation can drive emerging and established industry growth in a location, forming a critical source of future growth in trade and productivity
- A locus of innovation attracts both investment and talent
- Growth can help deliver local regeneration and positive change for the community
- A flourishing innovation hub can put a place 'on the map'

Image: Drivers of innovation places in the UK, 2021

Source: Hubs of Innovation: A Playbook for Place Leaders

Enterprise Drivers

Appetite of capital for risk investments

Place **Drivers**

Enabling technologies reaching new threshold

Industry

Drivers

Scientific discoveries with new market applications

Industry disruption

and competitive

pressures

Stronger enterprise systems and IP structures

Covid-inspired rise in entrepeneurship

Long-term re-urbanisation and agglomeration

Increased competition for assets, activities and talent

Net-Zero and post-Covid imperatives to build back better and reinvest in places

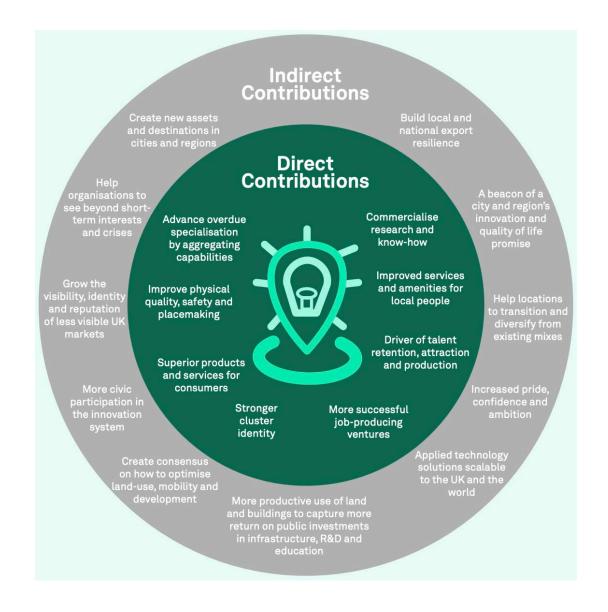


More Places of Innovation

Challenges

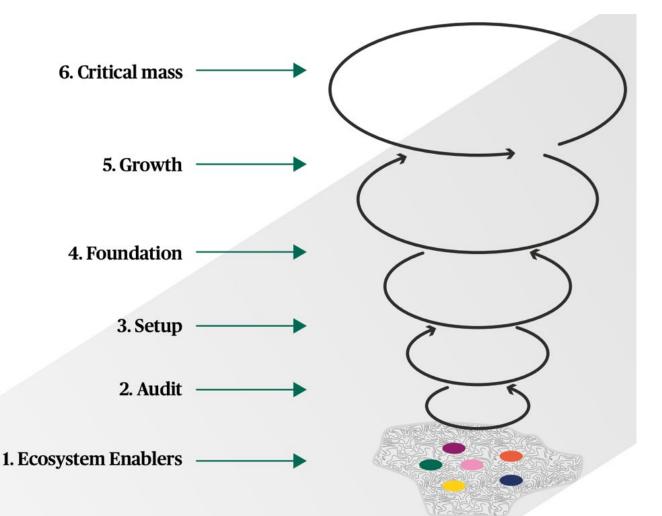
The path to delivering whole place return for an innovation place consists of many stages, spanning several decades, with numerous challenges:

- Attracting investment, partnership and talent with a compelling and unique offer in a competitive market
- Teams leading innovation hub strategies often lack time / capacity
- The **distinct roles** of government, business and knowledge actors in activating and sustaining an innovation place
- Delivering inclusive, clean growth aligning with wider strategic objectives, like net zero commitments and post-pandemic recovery
- The limited UK knowledge base about the relationships between technology, land use, clustering, governance, placemaking, promotion and community engagement
- Predicting outcomes. If we build it, will they come?





6 stages of the innovation place journey



The path to delivering whole place return for an innovation place consists of many stages, spanning several decades. Innovation places sit within a wider ecosystem of companies, research hubs, networks and convenors; fostering this ecosystem is often an important first step.

Ignoring the ingredients that make up the ecosystem, or failing to nurture them, is one of the most common and costly mistakes repeated by governments and place advocates around the world.

Ecosystem Ingredients

Housing and Land Use policies

Digital, Civic and Open Data platforms

Larger firms and future growth sectors

Enterprise-friendly pathways and regulation

Proactive and risk-taking knowledge anchors

Skills and talent appeal

Connectivity to markets

Access to capital

Government co-operation

Consistent themes throughout the journey

The precise mix of interventions is unique to each place, but **3 themes** remain as priorities throughout the **6 stages**:



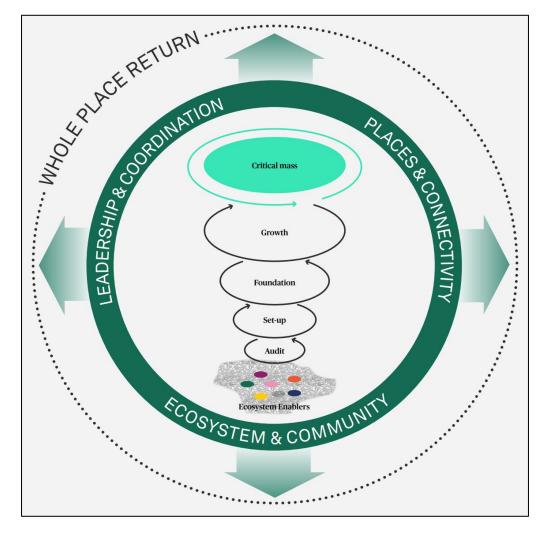
Place and Connectivity: development & making of a real sense of place, allied to agile mobility, with the spaces, platforms and connective tissue for collaboration



Ecosystem and Community: programmes, mentors, services, diplomacy, and engagement to build trust across all levels of institutions and with local communities



Leadership and co-ordination: charisma, seniority, governance, finance, profile, and commitment to drive disparate interests in a unified direction





What is KQ Liverpool?

Knowledge Quarter
Liverpool (KQ
Liverpool) is a 450-acre
urban innovation district
located at the heart of
Liverpool City Centre.

It is home to an array of world-leading assets including the Liverpool School of Tropical Medicine, University of Liverpool, Liverpool John Moores University, Liverpool Science Park, Paddington Village (including the Spine) and the cultural hub at Hope Street.



The KQ Liverpool Partners

KQ Liverpool is made up of six subscribing members who come together to create the Knowledge Quarter Liverpool Board, chaired by Tony Reeves, Chief Executive of Liverpool City Council.

The KQ Liverpool partners include: Liverpool City Council, University of Liverpool, Liverpool John Moores University, Liverpool School of Tropical Medicine, Liverpool University Hospitals NHS Foundation Trust and Bruntwood Sci-Tech.

A number of strategic members also sit on the KQ Liverpool Board including: Liverpool City Region Combined Authority; LCR LEP/Growth Platform; Hope Street CIC; Royal College of Physicians; Liverpool Health Partners and Marketing Liverpool.













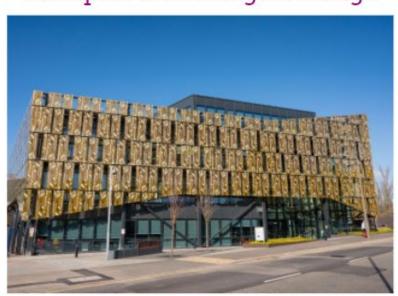


Home to World-Leading Innovation Assets

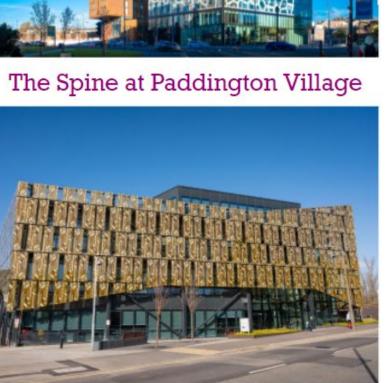


Liverpool Science Park Campus





Clatterbridge Cancer Hospital



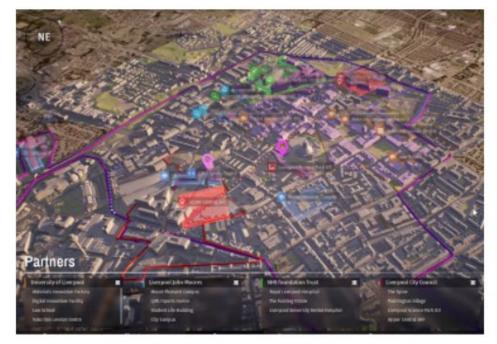
Sensor City



The Accelerator



Materials Innovation Factory





The KQ Spatial Masterplan

The KQ Liverpool Innovation District is in a constant state of change with new developments planned across the entire district in the next 10-15 years.

Working with the partner estates teams we have created a fully immersive 3d model to begin masterplanning the area and working collaboratively to create a vision for the future development of the innovation district.

The KQ Spatial Masterplan unlocks the potential for us to create a greener city through enhanced public realm strategies, create a safer district by investing in wayfinding and safe street technology and help develop clean air zones and reduced carbon emissions that adhere with the city's local plan.

The plan also enables us to identify the current gaps between developments and identify future innovation sites, eventually expanding to create an innovation corridor joining KQ Liverpool to Wavertree, Alder Hey and the M62.





APPENDIX



1. Ecosystem Enablers

The foundations of an effective innovation hub strategy should be identified and benchmarked early on. This establishes the viability of the strategy, and saves time and resources for place leaders in the long-term.

Core objectives



- Establish high information flow and networked knowledge among anchors and businesses
- Support a robust 'whole region' economic strategy organised around future market drivers
- Identify the catalysts and barriers to access risk capital
- Proactively optimise planning agility and flexibility of land use
- Encourage open civic innovation platforms
- Enhance government co-operation and innovation appetite

Sample activities



- **Engage** markets to characterise potential 'innovation plays'
- Map stakeholders to implement the innovation hub – including linkages to regional/national players and strategies
- Review relevant data, including innovation offers, access to capital and enabling infrastructure in the national/global innovation place context.

Sample outputs

- Identified innovation play(s) to investigate and validate
- Network of key actors and influencers identified and engaged
- Benchmarking of innovation hub potential
- Action plan for advancing to an innovation hub strategy.



Common issues to avoid at this stage

- Progressing to a specific proposition while collaboration is limited.
- Focusing on tech transfer rather than broader culture, place, talent.
- Reliance on the expansion of existing institutions.
- Assuming incentives for innovation are exclusively at national level.

Case study: Leeds Innovation District

Leeds Innovation District has picked up real momentum through a thorough evaluation of the innovation and entrepreneurial ecosystem. Its ambition for innovation to drive commercial opportunity, diversity and a greater social impact is being realised as part of the strategy delivered from the MIT Regional Entrepreneurship Accelerator Program (REAP).

One initiative developed from the programme is BUILD, a pre-start accelerator which focuses on developing ideas with profit and purpose from diverse founders. Both the University of Leeds and its innovation hub Nexus have been key stakeholders in fostering of the wider innovation ecosystem. Nexus was one of the first projects to mature and become operational in the emerging innovation district. It connects businesses with research and nnovation expertise, talent and skills and facilities at the University, working together with businesses to de-risk innovation and maximise returns.

The evolution of the innovation district has meanwhile been underpinned by the investment commitment of the universities and teaching hospital, which is a catalyst for the district's focus on health innovation. The Hospital working with Nexus and other partners has established an Innovation Pop Up to coalesce their health innovation capabilities and support industry-focussed collaboration. This is the first phase of a wider redevelopment planned from 2023 onwards.

2. Audit

With a niche for a local innovation hub identified, a place should then fully assess the feasibility of bringing together the various assets - institutions, spatial economy-related, committed key players – needed to succeed.

Core objectives

- Comprehensively assess your innovation assets
- Confront your strengths and weaknesses head on
- Review whether the region really needs it and if senior leaders want it
- ✓ Spot the complementarities
- Identify catalytic stakeholders capable of contributing to the whole ecosystem
- ✓ Look for potential quick wins

Sample activities

- Conduct SWOT analysis for innovation play, in the context of competing assets and places
- Research comparable innovation place case studies, and relevant insights and learnings
- Review land use and planning data and policy
- Coordinate workshops with key stakeholders to align on the innovation hub vision
- Open civic innovation challenge, to invite a broad range of voices and ideas.

Sample outputs

- Mobilised group of key stakeholders with a shared view on the opportunity
- Assessment of project viability, providing a basis for determining the way forward
- Collated planning data, to guide location decision making
- Engaged, influential players in the wider ecosystem to support the strategy
- Potential to create an ongoing forum for stakeholders to continue to engage.



Common issues to avoid

- Omitting to enlist leading businesses.
- Rushed process responding to external incentives or deadlines.
- Limited engagement with partners to build buy-in.
- Failure to benchmark against national or international peers.
- Relying on selective data at the expense of wider insights, or stories.

Case study: Perth West, Perth

Perth West is an ambitious effort to drive the green economy and support Perth's wider aspiration to become one of Europe's most sustainable small cities. Audits of the city's smart and innovation capabilities have been critical to highlight the city's potential to establish its value proposition, recognise its growth strategies and identify suitable locations as centres of gravity.

To facilitate the low carbon transition, project leaders have adopted a strong early focus on pilots and demonstrators, and public infrastructure enablers. Enabled by the Tay Cities Deal, one of the locations, the Perth Innovation Highway, is a physical and digital corridor that aims to imagine the future of urban mobility land uses. It will be integrated with the first phase of the Perth Eco Innovation Park, that will include commercial and research facilities and public amenities with significant test space for urban mobility solutions including last mile delivery, MaaS, active travel and blue green infrastructure.

As part of its audit, Perth has recognised the need for a USP of social and global responsibility. In this early phase it is working on whole city clustering efforts and market building. Spotting the risk of silos, it has also prioritised a cohesive governance structure that integrates energy, mobility and digital systems and aligns planning, investment, enterprise and industry's interests with the city's strategy. This has been achieved through a Memorandum of Understanding between the Council and project promoters.

3. Setup

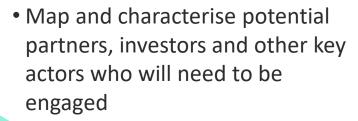
With a viable innovation hub concept based on known enablers, and the right stakeholders engaged, this phase will bring the vision together into a compelling narrative, and a method of benchmarking progress of the vision.

Core objectives



- ✓ Establish a genuine USP
- ✓ Build a committed coalition of stakeholders and capital partners
- Define a credible vision and compelling narrative
- ✓ Develop an inclusive growth framework from the outset
- Embed flexibility and net zero principles
- ✓ Establish meaningful baseline, benchmarks and targets

Sample activities



- Workshops and stakeholder interviews to identify potential key value elements of innovation hub proposition
- Establish ways of working for a core innovation hub group
- Define the hub's mission, foundations and principles.

Sample outputs

- High-level, differentiated proposition and narrative to engage key partners and investors for the innovation hub
- Established working group to deliver innovation hub and engage wider stakeholders
- A baseline and set of goals for tracking progress.



Common issues to avoid

- Poor fit with investors' changing requirements.
- Location not motivated by real specialisation.
- Lack of differentiation or grounding in wider place's DNA and expertise.
- Failure to provide seed capital.
- Restrictive framework inadvertently stymies or deters organic growth

Case study: Belfast Innovation District

Belfast is an example of a city's public, private and academic leaders coming together to focus on a specific geographical district. This leadership group 'Innovation City Belfast' has identified a smaller number of specialisms where Belfast really can be world class while at the same time taking a proactive role in ensuring that inclusion is at the heart of the approach.

Through the Belfast Region City Deal, city leaders are seeking to invest over £320 million in new centres of research excellence, in advanced connectivity, in skills and inclusion programmes, and in mission-driven challenge funds, with the collective aim of inculcating digitally-enabled innovation to grow the regional knowledge economy to ten times its current size.

In terms of geographical reach, the geography of the district is expanding to include much of Belfast's city centre. This will include the Ulster University's new campus and a number of other major planned public and private investments. The district is fostering a 'whole place' approach that seeks to foster an innovation community that collaborates across industry, universities government, and directly with its citizens. A place where it is easy for businesses to form and scale; for investments to flourish; and for next generation urban services to be developed, trial and implemented in a post-Covid world

Foundations

There are two key actions at this stage: maximise the appeal of the selected innovation hub location through effective planning; and engage partners and investors with your innovation hub proposition.

Objectives

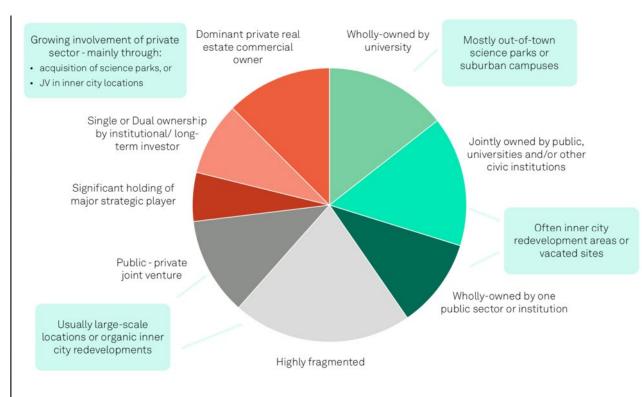
- Strengthen the governance and delivery model
- Identify a hub centre of gravity for collaboration and flagship activities
- Invest in the community and the crossovers
- · Create flagship visibility
- Attract a signature tenant, forum or event
- Ensure strong degree of coherence between site plans, masterplans and place vision

Sample activities

- Co-design and deliver engagement plan for primary stakeholders
- Guidance on the masterplanning and mobility infrastructure for the innovation hub location – including e.g. walkability, micromobility
- Urban innovation competitions and Open Calls
- Broker investor and partner events.

Sample outputs

- Identified innovation play(s) to investigate and validate
- Network of key actors and influencers identified and engaged
- Benchmarking of innovation hub potential
- Action plan for advancing to an innovation hub strategy.



Ownership model of 100 UK innovation places Source: Hubs of Innovation: A Playbook for Place Leaders



Common issues to avoid

- Over-reliance on a single catalyst; failure to sequence with infrastructure delivery.
- Challenges acquiring a strategically decisive land share.
- Focusing too much on property, at the expense of community building and organisation habits.
- Lack of footfall, people, commercial users or interest. Overclaims and generic boasts
- Lack of stakeholder consensus to commit dedicated resources

Case study: Queen Elizabeth Olympic Park

9 years on from the Olympic and Paralympic Games, Queen Elizabeth Olympic Park has matured into a location that has translated its partnership momentum into a bold whole-place approach to civic innovation. A 560-acre managed estate, the Park has gradually assembled a compelling set of knowledge anchors growth businesses and innovators.

A central part of the Park's innovation offer has been Plexal, a centre whose innovation teams provide start-ups and scale-ups with proven programmes to connect to London's corporates, institutions, academia and investors.

The next stage will see other emerging anchors within the Park such as UCL East, Loughborough in London, East Bank partners and Lendlease connect further with the likes of Here East and Plexal, as well as with the communities and authorities that surround them, in order to develop the Park's full innovation potential.

Another critical element of the Park's innovation matrix is the core and consistent focus on inclusive growth and inclusive innovation. Bespoke, early entry accelerator programmes such as Echo ++ and East London Inclusive Enterprise Zone have already started to broaden the field of who gets to innovate, and on what. The Park's experience illustrates the civic and commercial value that starts to accrue in a place by fostering an environment where reciprocal habits of leadership, business behaviour, and civic interaction can take root and flourish.

Growth

At this stage, the focus is on attracting innovators and talent, and developing the profile of your innovation hub, nationally and globally.

Example activities

- Establish a living lab or testbed environment to encourage innovation
- Co-design place-based standards, to encourage adoption and interoperability of innovative technologies
- Working closely with the community, launch Open Calls and Accelerators to cluster innovators around local priorities and challenge areas
- Develop and deliver an engagement strategy for the wider network of influential stakeholders
 raising the innovation hub's profile and creating conditions to support growth.

Outputs & outcomes

- Attraction of businesses and talent via testbed and Open Calls
- Convening of an ecosystem with aligned purposes and innovation priorities
- Broader investor and user base
- A stronger place narrative
- Raised profile globally, including government and the private sector.

Critical Mass

6. Critical mass

Build on your initial successes to deliver a sustainable, ongoing innovation hub model. Monitor and maximise impact on wider socioeconomic ambitions for the region.

Example activities

- Provide the tools to monitor and communicate the hub's spillovers and benefits to wider stakeholders
- Create the structures for managing and administering larger funds on an ongoing basis
- Provide the framework for managing ongoing environs improvements, to continually re-establish open community spaces, micromobility services, and to manage externalities.

Outputs and outcomes

- A sustainable model for long-term delivery
- The strategic and impact focus to maintain relevance and competitiveness
- Demonstrable impact on the local community, economy and delivery of the regional strategy.

