The Data City Summit '24

Thursday 7th November 2024



So, the plan for today...

Session #1 - 12:30 - 14:30

- The Data City Paul Connell, Alex Craven, Tom Forth
- Dealroom Orla Browne
- **EY** Lynn Rattigan, Charles Watson
- Centre for Cities Paul Swinney
- The Lifted Project Zandra Moore, Jordan Dargue,
 Natalie Boswell, Alex Craven

Followed by a short break for refreshments.

Session #2 – 15:00 – 16:30

- **Lightcast** Will Cookson, Duncan Brown
- HVMC Daniele Marini
- The Northern Powerhouse Partnership Andrew McPhillips, Fatima Garcia
- The Midlands Engine Joshua Hawkins, Lukasz Gasienca-Fronek
- Closing statements The Data City

Followed by drinks & networking.



Session #1



Building the new industrial classification system

The Data City Summit – November 2024



SIC is sick...

Standard Industrial Classification (SIC) codes underpin major investment, policymaking and business decisions.

But have major issues....

- Frequently wrong, vague, and insufficient.
- Last updated in 2007 and unable to capture the emerging economy.
- Affects every business bank application and every business insurance policy
- A nation of otherers.. 40% of workforce work in 'other..'

SICs

96090: Other service activities n.e.c.

RSICs 😽

85600: Educational support services

85590: Other education n.e.c.

85421: First-degree level higher education

85422: Post-graduate level higher education



Who needs a new industrial classification system?



Mapping & measuring the economy, developing policy and intervention strategy



Finance

Meeting AML/KYC/KYB obligations, understanding risk, improving customer experience and NPS



Industry & markets

Mapping markets, finding customers, developing new products



The new industrial classification system

SIC

the established system

Wrong. Vague. Insufficient. Static. **RSIC**

the updated system

SIC Codes, Fixed.

RTIC

the emerging economy

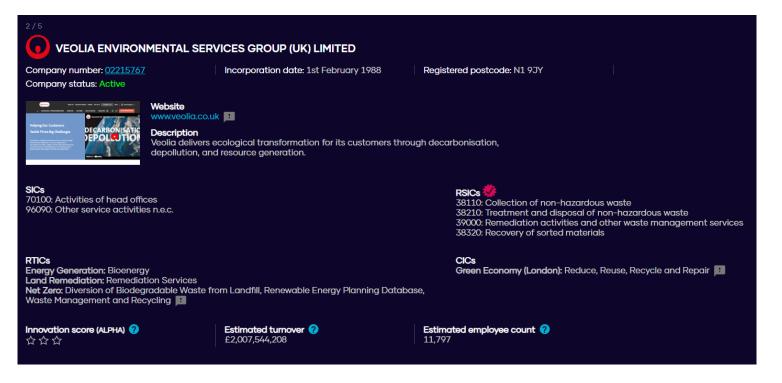
Real-time view of 400+ emerging sectors missed by SIC Codes.

The Data City provides a full view of the whole economy, from established industries to emerging sectors.

7



We tell you what companies do





The vision: A global system









The Data City will be able to view any website in any classification system in the world, simultaneously.

9



Industrial strategy green paper

Where necessary, different metrics were used for emerging subsectors and technologies, as these are less well captured by traditional SIC sector data [footnote 57]. Measuring emerging technologies is also challenging as they are not linear and predictable, and they interact with each other. To mitigate data challenges, evidence was triangulated from academic evidence, market intelligence, industry reports, and relevant datasets.

These subsectors were then aggregated to identify the 8 growth-driving sectors:

- · advanced manufacturing
- · clean energy industries
- creative industries
- defence
- digital and technologies
- financial services
- life sciences
- professional and business services





Industrial strategy green paper

Where necessary, different metrics were used for emerging subsectors and technologies, as these are less well captured by traditional SIC sector data [footnote 57].

Questions

- 1) How should the UK government identify the most important subsectors for delivering our objectives?
- 2) How should the UK government account for emerging sectors and technologies for which conventional data sources are less appropriate?
- 3) How should the UK government incorporate foundational sectors and value chains into this analysis?

Questions

- 4) What are the most important subsectors and technologies that the UK government should focus on and why?
- 5) What are the UK's strengths and capabilities in these subsectors?
- 6) What are the key enablers and barriers to growth in these subsectors and how could the UK government address them?



Why today – 3 asks!



Respond to the industrial strategy green paper

Tell the government to establish and fund a common evidence base for the 8 growth sectors across National & Local government and Industry using The Data City & RTIC's.



Seek inspiration

Enjoy learning about how others are using our data, talk to us about we can help you to use our data.



Challenge us

We want to be the best at what we do, we need our customers to work with us on our new products and services to achieve that.



Building the new industrial classification system

Live demo.



Digital (economy) transformation: why startups matter, and the global innovation race

Orla Browne The Data City Summit - Leeds - 7 November 2024

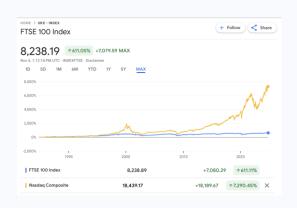
1. The good news - the rise of UK tech

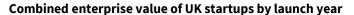
- 2. The opportunity why startup matter
- 3. The urgency what's at stake right now

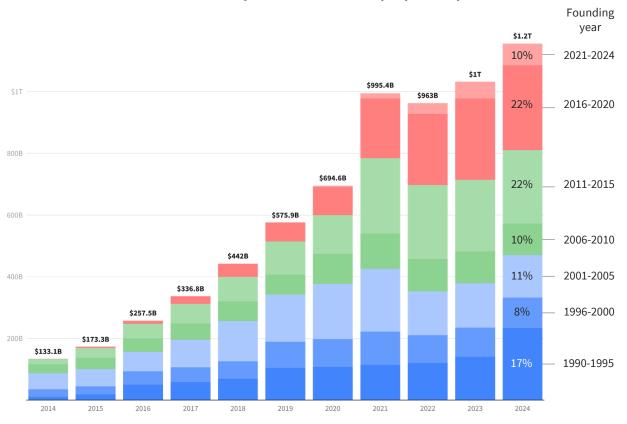
UK's tech ecosystem has a combined value of over \$1 trillion (10x in a decade).

By comparison:

LSE = \$4.2T (up 73% in 10 yrs) FTSE 100 = \$2.6T (up 20% in 10 yrs) Nasdaq Composite = \$20.5T (up 4x)





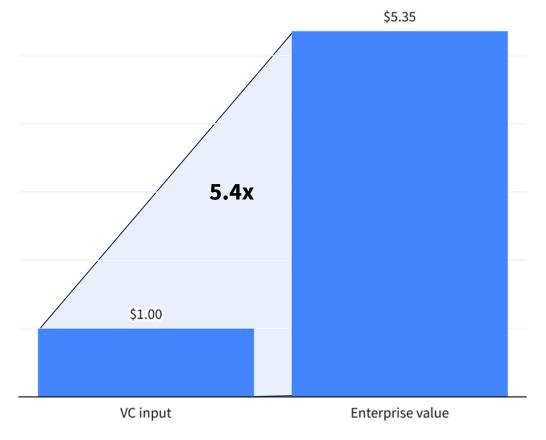


Page / 16 Source: Dealroom.co. dealroom.co.

Venture capital is a value multiplier.

UK startups have generated \$5.4 of value for every dollar of VC investment raised.

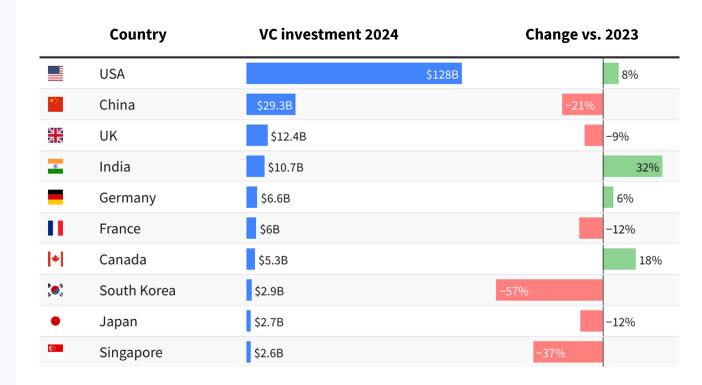
UK tech enterprise value created per dollar of VC invested



The UK is the #3 tech ecosystem in the world.

By far #1 in Europe.

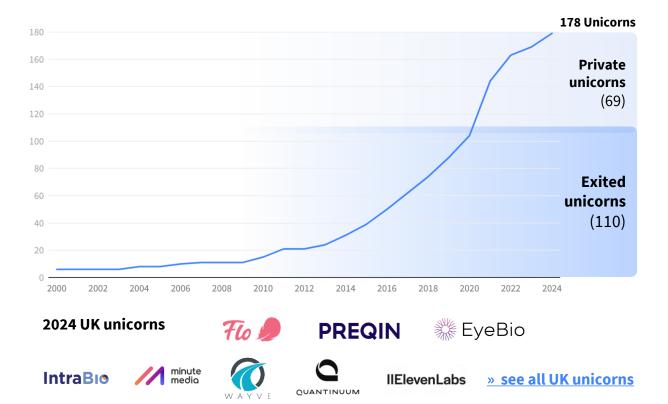
Top 10 global countries by VC investment in 2024 » view online



The UK has now created 178 unicorns, with eight additions in 2024.

14 have reached decacorn status.

Cumulative UK Unicorns

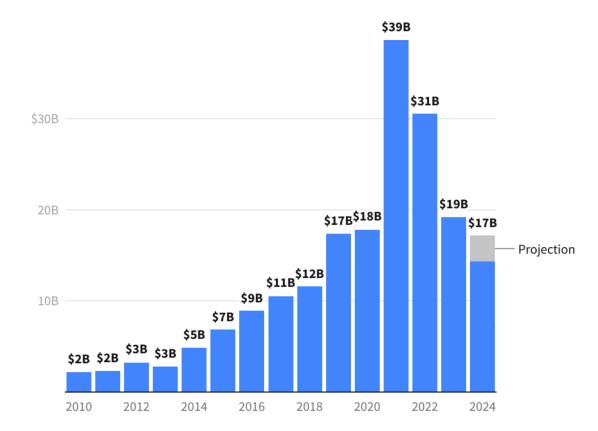




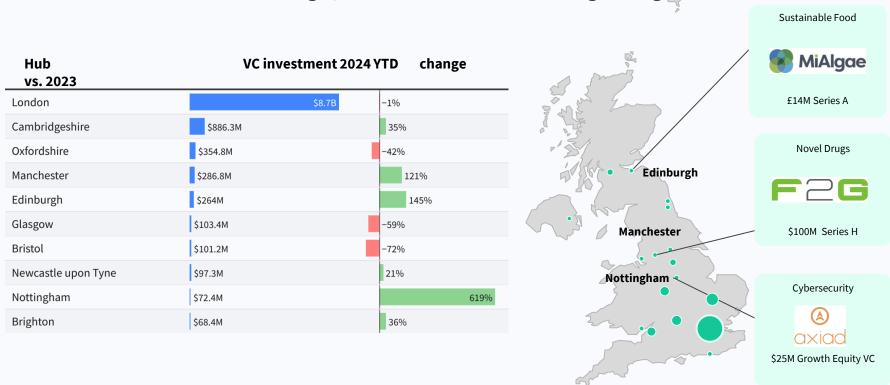
UK startups raise 10s of billions in venture capital investment each year.

Investment levels are still at 6x a decade ago, even during a down cycle.

VC investment into UK startups >> view more

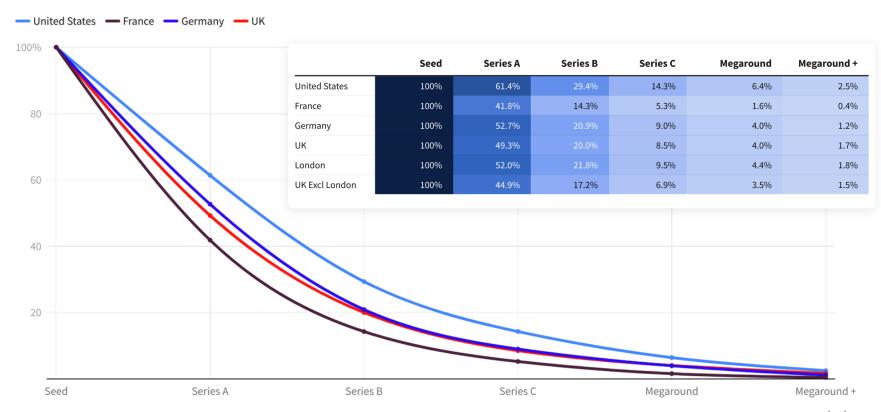


Cambridge and Oxford startups have raised the most new venture capital outside of London in 2024. Edinburgh, Manchester and Nottingham grew by over 100%.

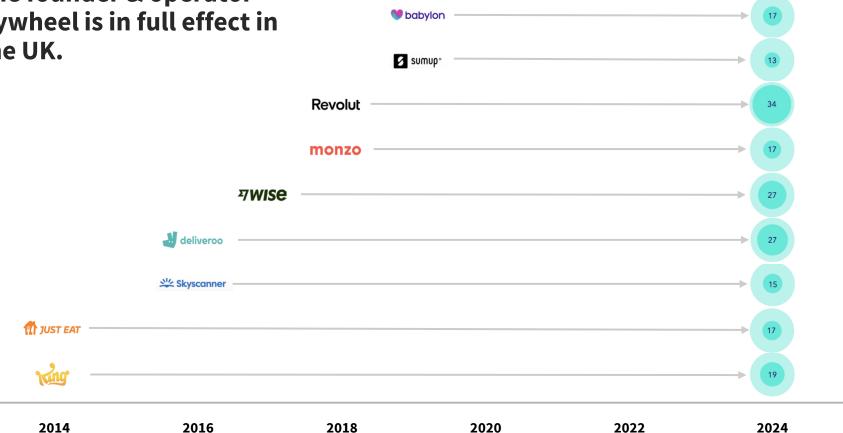


Encouragingly, startups outside London scale at a similar rate as those in London.

Conversion rate of cohorts founded between 2010-2021



The founder & operator flywheel is in full effect in the UK.



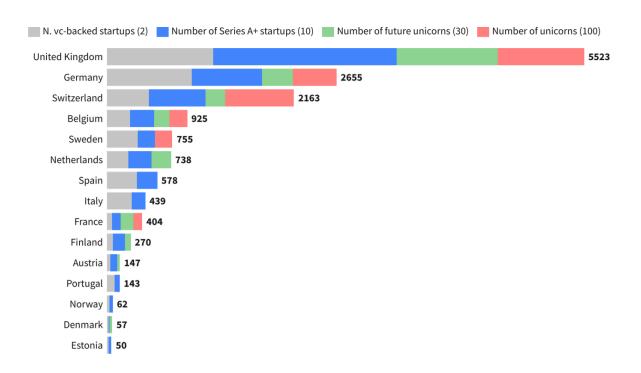
dealroom.co Accel & Dealroom.co - full report

The UK leads Europe by university spinouts.

Source:

Dealroom.co Data as of 27 Nov 2023 University value creation is ranked by multiplying the number of startups at every stage of maturity for a score 2 for a VC-backed startup to 100 for a unicom. Spinouts policies vary from country to country. Countries like France and Sweden are hard to compare due to the professor privilege model, where universities have no stake in any research innovation coming out of the activities carried out there. The definition of spinouts and their comparison with other countries like UK, Germany and Switzerland is therefore challenging. Some universities such as KTH collaborated in sharing detailed data for a fair comparison. The ranking might evolve with better involvement of more universities.

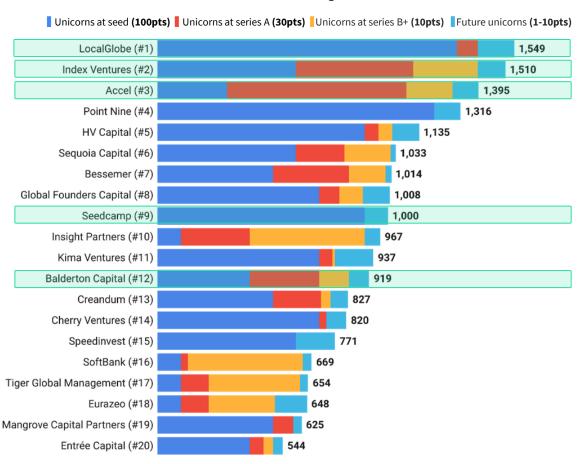
European countries which created most spinout value



Page / 24 dealroom.co

The UK is still
Europe's capital of
venture capital, but
Germany and France
are becoming
contenders.

2023 Combined EMEA ranking

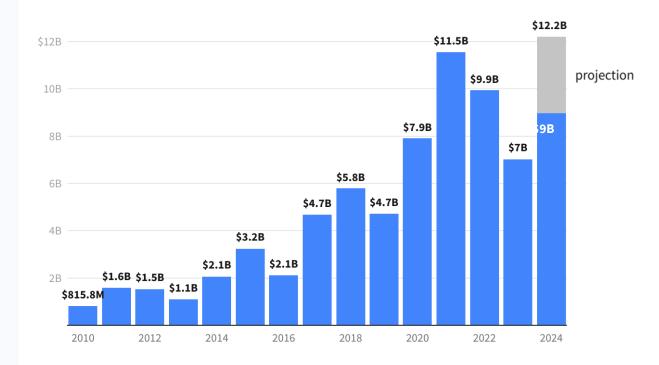


Page / 25 Source: Dealroom.co. dealroom.co

UK VCs have more dry powder than ever before.

On track for record year.

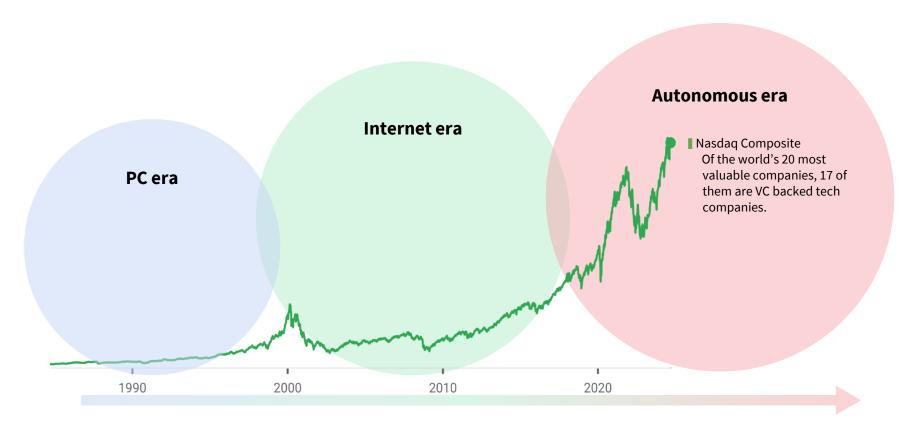
UK new VC funds raised



Page / 26 Source: Dealroom.co. 2024 actual to end of Q3.

- 1. The good news the rise of UK tech
- 2. The opportunity why startup matter
- 3. The urgency what's at stake right now

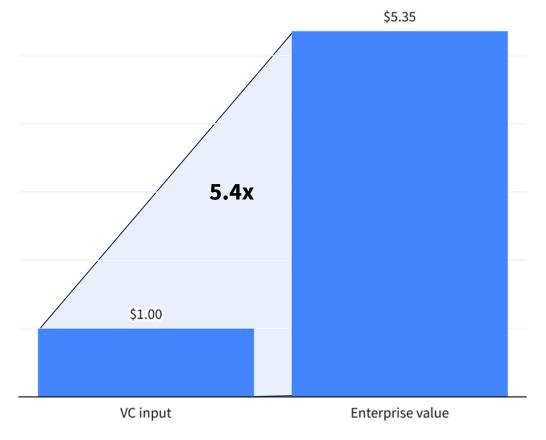
Entering a new era in tech - the autonomous age.



Venture capital is a value multiplier.

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UK tech enterprise value created per dollar of VC invested

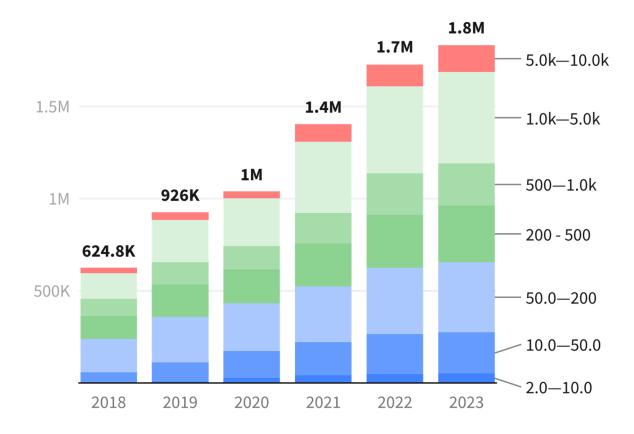


UK startups employ 1.8M people.

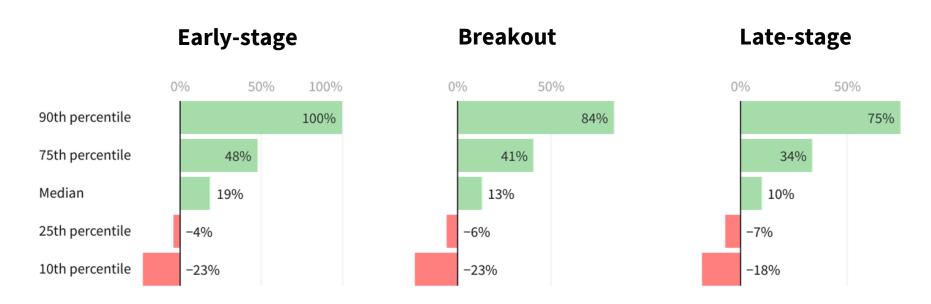
4x job growth since 2018.

90% of startups have <100 employees.

Employees by team size in the UK



Tech is resilient: most VC-backed startups continued to grow headcount in 2023.

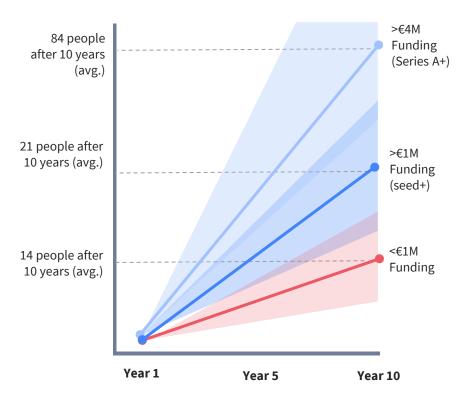


Last 12 months change in headcount

VC-backed startups scale their headcount faster than non-funded companies.

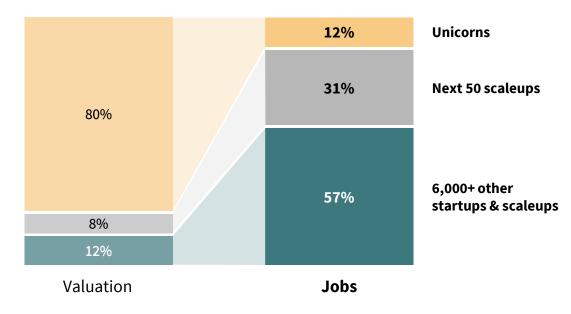
There's a positive correlation between startups and venture capital. On average, startups receiving seed funding scale twice as fast as those that didn't. Series A+ startups grow four times faster.

VC-backed or not: very different growth trajectories



Though a larger number of earlier-stage startups create the majority of jobs.

Proportion of Dutch ecosystem valuation and startup job employment by company size

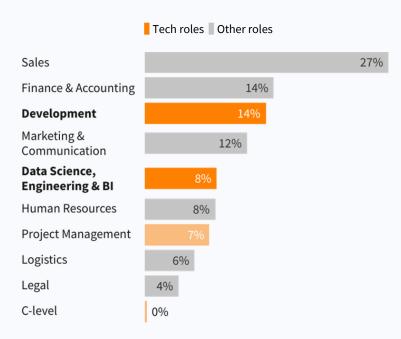


Page / 33 Source: Dealroom.co. Netherlands case study, dealroom.co

Most "tech jobs" are non-technical roles. In 2023, most startup vacancies were for Sales and Finance roles. Technical and product-related roles accounted for 29% of jobs.

% of vacancies by roles at startups globally, 2023

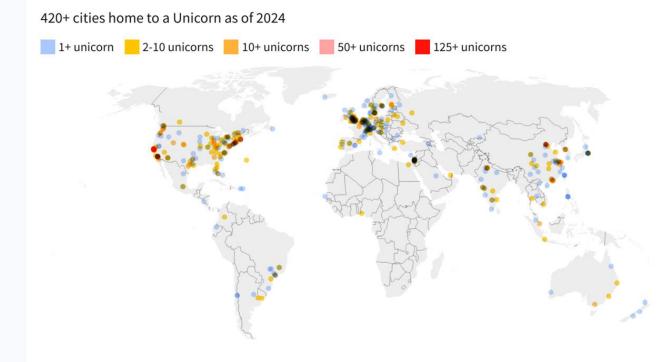
January-November 2023, 0.9M openings



- 1. The good news the rise of UK tech
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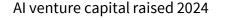
More than 420 cities in the world have produced at least 1 unicorn.

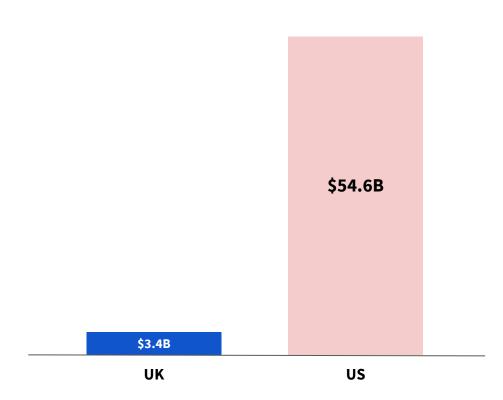
Tech can come from anywhere, and the competition is global.



US AI startups have raised 16x the funding of UK startup in 2024.

In key new frontier technology area UK is not yet competing.





Source: Dealroom.co. Data to 6 Nov 2024

Nvidia alone is worth more than the entire FTSE 350.

(Combined) Market Capitalization

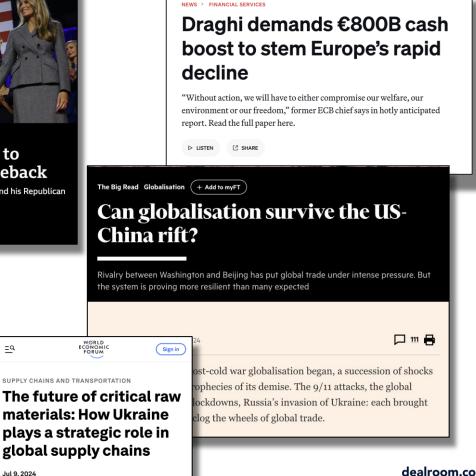


Geopolitics and tech sovereignty



Jul 9, 2024





Today's global problems require new scientific & technological breakthroughs to solve.

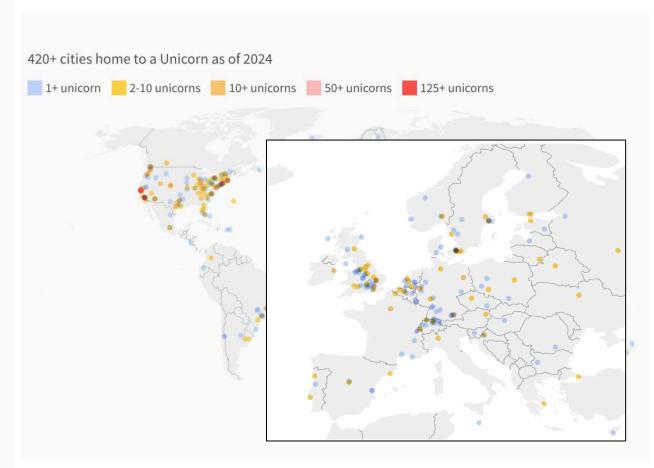
Deep Tech is instrumental to tackling today's biggest challenges, from climate change and food security to intractable disease.



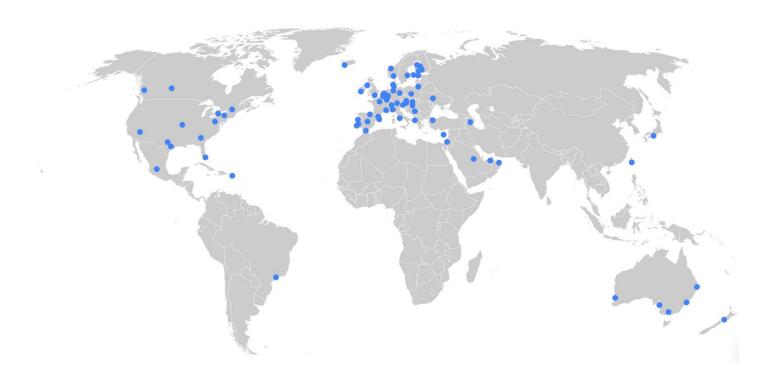
Page / 40 Source: Source: Dealroom.co

But the UK and Europe *are* well positioned.

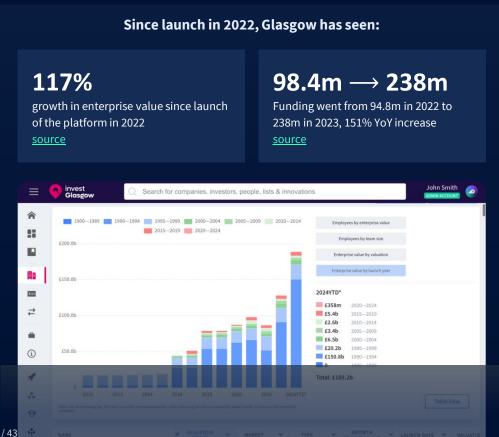
If the opportunity is seized.



Dealroom works with over 100 local and national governments to help accelerate their startup and innovation ecosystems.



How much has the Glasgow ecosystem grown since launching their platform?



Detecting more early startups and innovations

41 Unicorns

38
Future unicorns

620 Funded startups

2829 companies tracked





Dealroom ecosystem data is already trusted by **national and local UK government**.

























orla@dealroom.co



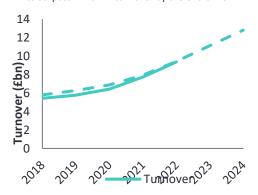
Understanding the basics of the Female SuperScalers who contribute around £7 billion to the UK economy

Across the UK, we have identified 45 Female SuperScalers¹. These businesses, have made, and continue to make significant contributions to the UK Economy.



There are also currently 242 companies in the £20mn to £50mn bracket which we believe are the SuperScaler 'Ones to Watch'. Many are high growth companies which may hit £50mn soon, and hence become the new generation of Female SuperScalers.³

The Top 10 Female SuperScalers are collectively projected to surpass £12bn in turnover by the end of 2024.



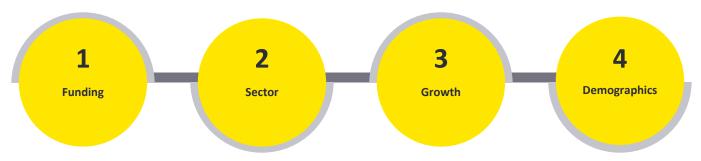


¹ See definitions on page 22

² Business contribution by Gross Value Added

³ TheDataCity — except where footnoted, data used in this report was provided by TheDataCity

There are 4 key factors that have contributed to the success of the Female SuperScalers



Access to funding

- ► Access to funding has been critical to the success of Female SuperScalers, but female founders still struggle to attract their fair share vs. their male counterparts.
- ► Female SuperScalers have preferred to finance their growth via venture capital.

Sector specialisation

- ► Female SuperScalers are present in a number of sectors but are particularly strong in Consumer Goods and Services.
- ► Consumer Goods and Services was the dominant sector by far, both in terms of turnover and absolute numbers of companies.

Growth trajectory

- ► Female SuperScalers have had steep initial growth trajectories.
- ► Female SuperScalers have expanded globally.

Demographics and Location

- ► Female SuperScalers were younger than average when founding their businesses.
- ▶ London is a hotspot location.

Access to funding has been critical to the success of Female SuperScalers, but female founders still struggle to attract their fair share of funding vs their male counterparts

Funding

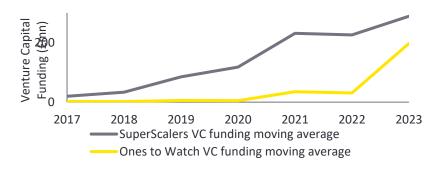
Venture Capital (VC) is a form of funding used by young companies during their initial growth stages. It's a critical ingredient in the success path for start-ups and scale ups to grow and meet their potential.

Female SuperScalers have been more successful at attracting this type of funding, with £22mn raised per company, compared with £3.28mn by the Ones to Watch per company.

They have also been more effective at utilising this initial capital to generate profits, with the SuperScalers generating three times higher returns on their venture capital than the Ones to Watch.

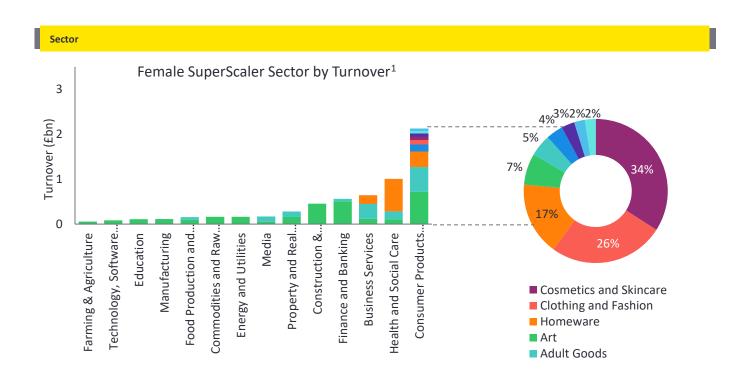
This success was achieved in a context where on average, female founded companies still only receive 2p for every £1 invested, compared to 14p for mixed-sex founding teams and 84p for male — only founded entities¹.

The tide is turning for the Ones to Watch, as they increasingly receive Venture Capital funding



¹ British Business Bank, Small Business Equity Tracker (2023)

Female SuperScalers are present across a diverse array of sectors but are particularly strong in Consumer Products and Services



¹ N.B. One company has been excluded from this slide for the sake of requested anonymity

Trailblazing together: empowering voices of the SuperScalers who did it



Anne Boden MBE Founder and CEO, Starling Bank



66

More than two decades of experience have shaped Trinny London into the global brand it is today, and we want to pass it on. We're dedicated to helping female founders who are earlier in their journey, and to closing the gender gap in VC funding whether through our Elevator Pitch series or the business dinners we run for women across the country. We want to inspire women to feel fearless in trusting their gut and launching the endeavours they've always wanted to.

Trinny Woodall

Founder and CEO,

Trinny London



Rosaleen Blair CBE Founder and Chair, AMS

There is lots more that still needs to be done to make sure the next generation of female entrepreneurs are able to embrace the opportunities that lie ahead and take a major role in building the high growth business that will transform all our lives over the next decade and beyond. There will be, and indeed already is, a huge amount of money floating around to fund innovative businesses that won't just add value for customers but will transform all of our futures.

66

In 1996 I founded AMS to transform the way that bluechip multinationals attract, engage, and retain top talent. Today AMS is a global business, with 8,000 colleagues in over 100 countries. In 2018 AMS was sold for £820mn, and in late 2019 I moved from CEO to Chair. Along with other philanthropic work, such as the London Irish Centre and Prince's trust, I'm also on the board of Everywoman, which aims at supporting female business leaders. In this role I have been exposed first-hand to the sheer level of untapped potential of female business leaders in the UK, which I aim to coach and inspire.

66

At the frontier: The geography of the UK's new economy

Paul Swinney



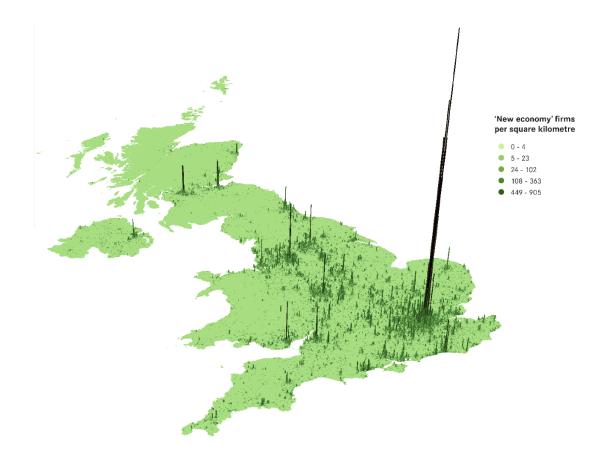


It's that time again...





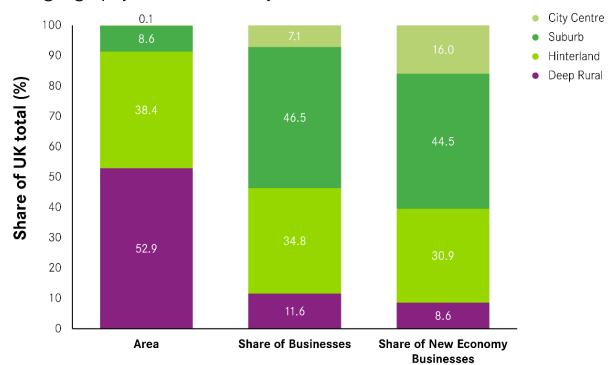
The UK's new economy is spiky





It clusters within cities and city centres in particular

The geography of new economy firms

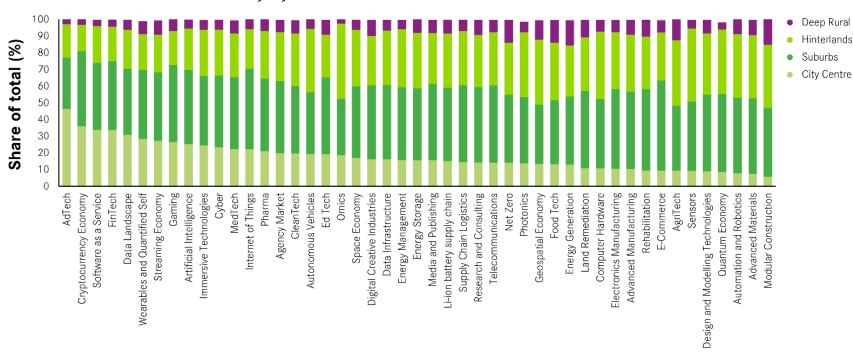


Source: The Data City; ONS

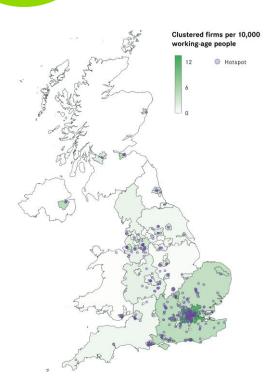


...especially for services activities

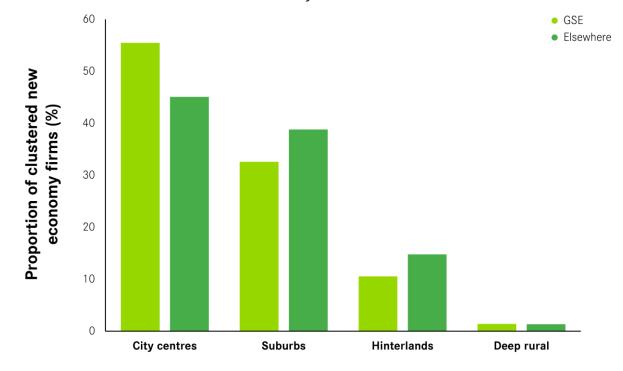
Distribution of the new economy by RTIC sector



Where are the hotspots?

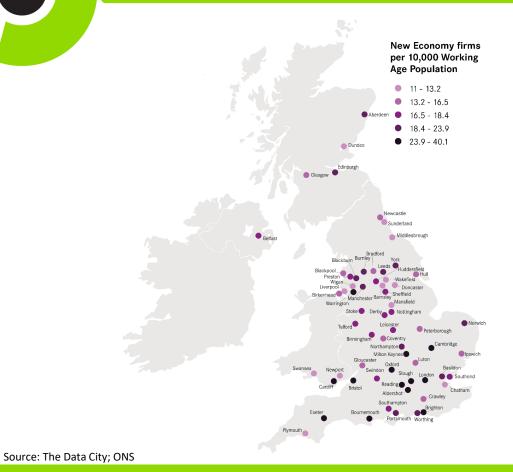


Locations of clustered new economy firms





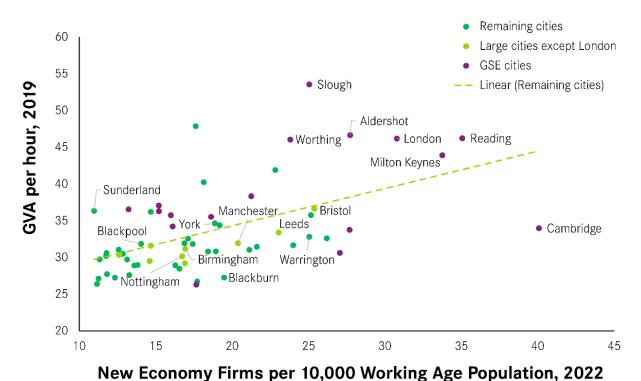
But not all cities are new economy hubs



Rank	p	ew economy firms per 10,000 working e population, 2023	
10 cities with the highest number of new economy firms			
1	Brighton	46.8	
2	Cambridge	43.2	
3	London	43.2	
4	Milton Keynes	37.0	
5	Warrington	34.5	
6	Aldershot	33.6	
7	Reading	33.4	
8	Exeter	33.2	
9	Cardiff	33.2	
10	Oxford	33.1	
10 cit firms	ies with the lowest numbe	er of new economy	
54	Bradford	14.7	
55	Mansfield	13.8	
56	Doncaster	13.5	
57	Wakefield	13.4	
58	Hull	13.4	
59	Barnsley	13.4	
60	Newport	12.9	
61	Wigan	12.7	
62	Middlesbrough	12.4	
63	Sunderland	12.4	
United	Kingdom	25.6	



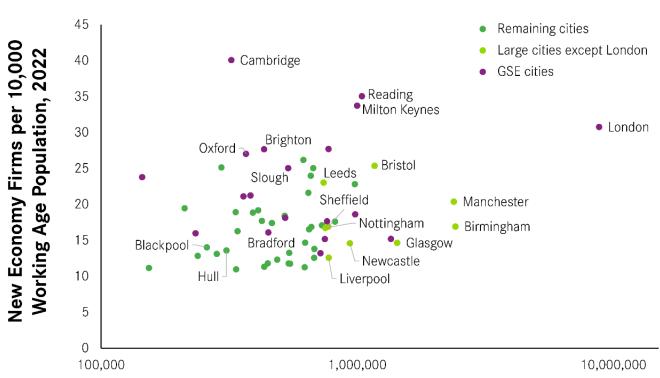
And this impacts their productivity



Source: The Data City



The big challenge for UK plc: big cities lag



Number of workers in commutable distance, 2011

Source: The Data City; ONS



- The industrial strategy should **use place as the lens** to encourage new economic growth, and be wary of an overly-specific sector-led approach. Cities are clusters.
- Nationally, making the **big cities more attractive to tomorrow's economy** is the big challenge.
- Locally it is about improving their potential to attract tomorrow's economy rather than on talking about today's 'strengths', and where this is likely to be within them.





Powering an increased flow of capital to UK regional, high growth female founders

REGIONAL DATA + ECOSYSTEMS

Delivered by Lifted Ventures









The **Lifted**. Project



JORDAN DARGUE CO-FOUNDER LIFTED VENTURES



ZANDRA MOORE CEO PANINTELLIGENCE



NATALIE BOSWELL REGIONAL DIRECTOR LLOYDS BANK



ALEX CRAVEN
CEO
THE DATA CITY











Break time!

See you in 30 minutes.

Session #2

Future-ready workforce:

How can cities prepare for the future?

Will Cookson, Account Director at Lightcast

Duncan Brown, VP for Global Innovation at Lightcast



About Lightcast

Our mission

To unlock new possibilities in the labour market.

Our aims:

Through labour market research, analytical software, and data expertise we help:

- Education Providers to connect their provision to the needs of the local labour market.
- **Communities** to create more effective programmes for economic prosperity.
- **Employers** to better understand their own workforce skills and identify talent for future growth.





We're here to help you!

STRUCTURAL LMI

Official statistics that help us to understand the building blocks of local labour markets

SOFTWARE

On-demand, easy to navigate webbased access to key intelligence on jobs, skills and industries

JOB POSTINGS

Data derived from online hiring activity, providing real time and detailed insights on employer demand

API/SNOWFLAKE

Data access via APIs and Snowflake for complete flexibility to use our data throughout your organisation and in public-facing services

PROFESSIONAL PROFILES

Data derived from online professional profiles and opt-in CVs, providing detailed insights on employer supply

APPLIED RESEARCH

Leveraging the expertise of our economists and data analysts to answer the specific questions and challenges your organisation is trying to solve

Partnership Timeline

- 2020 First became aware of Data City and RTIC's
- 2021/22 Explored how our respective datasets could be connected.
- 2022 Mapped and joined the Lightcast and Data City data platforms at company level
- 2022 First major project The Chartered Institute for the Management of Sport and Physical Activity(CIMSPA) Microsite
- 2023 Integrated Lightcast UK Job Postings insights into the Data City Data Explorer platform
- 2023 Applied datasets to the analysis of green skills demand in Surrey and North/Mid Hampshire
- 2023 Integrated Lightcast Global Job Postings with Data City RTIC's for a UK Government Department
- 2024 Well established partnership



The context

The rise of Al	Green transition	Digital transformation
Competitiveness	Rapidly changing labour markets	Increasing security
A A Labour mobility	Work-life balance	Demographic changes

What does it take to have a future-ready workforce?

Future-ready places have...

Future-ready economy

- Historical growth in employment signal future growth
- Tradable sectors drive growth & innovation

Future-ready foundations

 Durable skills are the foundation for innovation

Future-ready innovation

- Growth in recruitment activity signals growth
- Demand for disruptive skills signals innovation

Future-ready demographics

- A larger pool of young people protects from shrinking populations
- Immigration plays a similar role

Future-ready people

 A well educated workforce is better placed to spur and leverage innovation



How can we measure future-readiness?

Introducing the future-ready index



Countries

Australia, France, Germany, Italy, New Zealand, Singapore, Spain, United Kingdom, United States.



Data

A combination of data from official statistics such as EUROSTAT and the Labour Force Survey, and Lightcast proprietary job postings data.



Metrics

We identified metrics to match with each of the future-ready components and combined them to create a future-ready index using z-scores.



Key findings (1)

European cities lagging behind

- No European city large or small in the top ten.
- First European city is London, in 24th position.
- Demographic changes, the sector make up of the economy, lower historical growth and lower demand for durable skills appear to all be contributing factors behind the comparatively lower readiness of European cities.

Top 10 future-ready large cities

•	Nation name	Metro name	Share of Population Under 35	Foreign- Born	Jobs in Tradable	Historical Growth in Demand from Job Postir	Historical	Workers	Demand for Disruptive	Share of Demand for Durable Sk
1	AU	Melbourne								
2	AU	Perth								
3	AU	Sydney								
4	US	Austin								
5	AU	Adelaide								
6	US	Salt Lake City								
7	SG	Singapore								
8	AU	Brisbane								
9	US	San Jose								
10	US	Dallas								

The 10 most future ready European large cities

24	UK	London			
31	UK	Manchester			
32	ES	Madrid			
49	ES	Barcelona			
50	UK	Birmingham			
52	DE	Berlin			
60	ES	Sevilla			
67	UK	Glasgow			
69	DE	Munich			
75	DE	Stuttgart			

Key findings (2)

Large differences within Europe by size and location

- No European city scores high on all metrics.
- There are country specific challenges Southern European countries for example scores consistently lower in terms of young population and workers with degree level qualifications
- But there are also some bright spots for example some European cities like Madrid and London have an above average share of workers with bachelor degrees and equivalent qualifications.

Metro name	Share of Population Under 35	Foreign- Born	Share of Jobs in Tradable Sectors	Growth in Demand from Job	Historical Employmen	Workers with a BA	Demand for	Share of Demand for Durable Sk
London								
Madrid								
Berlin								
Milan								
Paris								

Key findings (3)

UK cities

- Within the UK, Leeds is 17th
- With all countries included, Leeds is 220th.
- Leeds does well compared to other countries on (1) Share of young people (2) Share of foreign born population (3) disruptive skills
- Leeds does lose out compared to other countries in particular in terms of historical growth in job postings and also to a smaller extent in terms of (2) durable skills



So what?

What can policymakers do to create future-ready workforces?



Data

- Having a solid evidence base is a game-changer.
- Importance of understanding overarching trends and the granular level.
- The data is there, it is a choice not to use it.



Business competitiveness

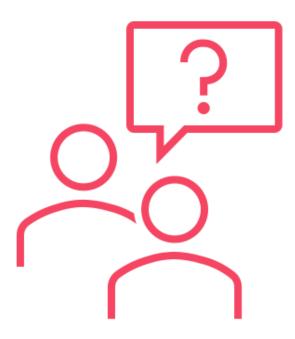
- Investing in innovation is key for growth
- First-mover advantage
- Leverage local differences and build on them.



Talent

- Ensuring businesses
 have access to the talent
 they need is essential
- It is more than just about qualifications - skills ever more important
- Soft skills as essential as technical skills

Questions / Observations



Research Reports



The Lightcast Global Al Skills Outlook

Al is changing the world of work ... but not in the way many imagined.





The Lightcast Digital Skills Outlook 2024

An insight-driven view of digital skills trends across key global labour markets.



https://lightcast.io/resources/research/the-lightcast-digital-skills-outlook-2024

Thank you! Any questions?

Contact details:

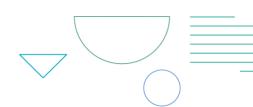
Will Cookson - Account Director - william.cookson@lightcast.io

Duncan Brown - VP Global Innovation - <u>duncan.brown@lightcast.io</u>

Web: Lightcast.io

Mapping the manufacturing Supply Chain

Dr. Daniele Marini07 November 2024























Established by Innovate UK in 2011, HVM Catapult is a group of research development and innovation centres transforming UK manufacturing

Working through and with our centres, we help to move the world-leading research of UK universities towards commercial uses

We are also part of the wider Innovate UK
Catapult Network,
where we help to coordinate the broader
innovation landscape in
the UK

Our purpose





HVM Catapult's seven innovation centres lead a collaborative alliance of research institutions, government and industry to accelerate industrial transformation and develop the new skills that will boost economic growth.

Industrial transformation for the UK



Net zero presents a unique opportunity for UK industry to **drive economic growth across the UK.**

To seize that opportunity, we need the **industrial transformation** to allow our pioneering R&D leadership and technology innovation to be turned into world-leading commercial reality.

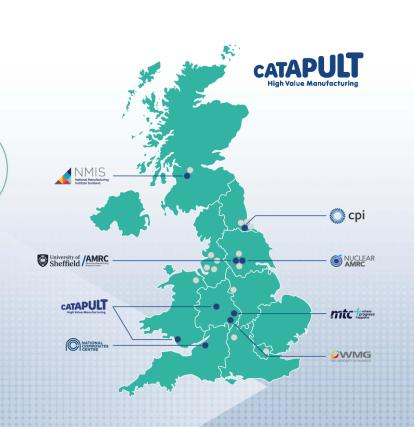
Through this we can:

- build resilient supply chains
- create new jobs, skills and prosperity for our citizens
- deliver productivity and growth for the UK economy
- level-up the UK's nations and regions
- access new global markets and encourage inward investment.



The High Value Manufacturing Catapult







Worked with 30,605 companies

Worked with **17,573**SMEs

12,582 collaborative and

collaborative and commercial projects

Our impact





5,800+

businesses work with the HVM Catapult each year seeking solutions to a problem, or new ideas for new products, processes or services

60%

of our business partners are SMEs





2,800+

ideas translated into commercial projects with companies each year



900+

engagements with UK academic institutions each year

to pull cutting-edge research into UK manufacturing

Industrial transformation: strategic priorities



HVM Catapult and its seven centres are addressing four strategic priorities:





Healthy Living

Driving engineering biology, agritech and health tech development and scale up



Net Zero: Clean Energy Transition

Creating UK clean energy supply chains: electrification, wind, hydrogen and nuclear



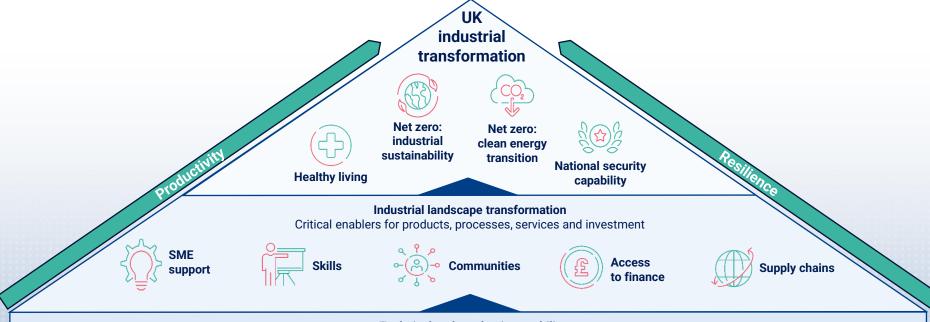
National Security Capability

Advancing defence and security product design, engineering and manufacturing, emergency response and preparedness

Driving industrial transformation on national strategic priorities



HVM Catapult maximises economic and social impact working collaboratively across seven technical research centres















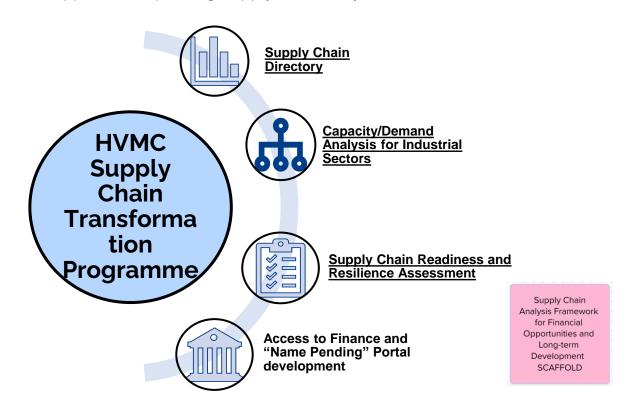




HVMC: Supply Chain Transformation Program (23/24, 24/25)

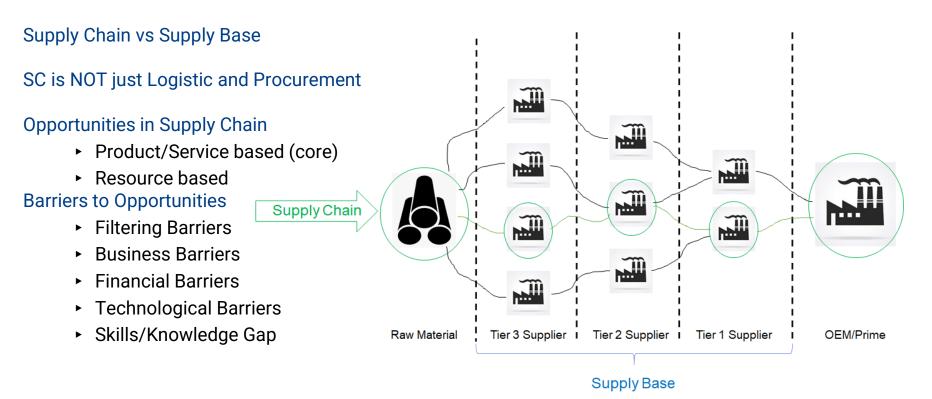


HMVC network is developing a strategic program that includes the development of digital tools to facilitate the supplier capabilities capturing, sector/opportunities profiling, supply chain analytics and intervention facilitation



Supply Chain vs Supply Base

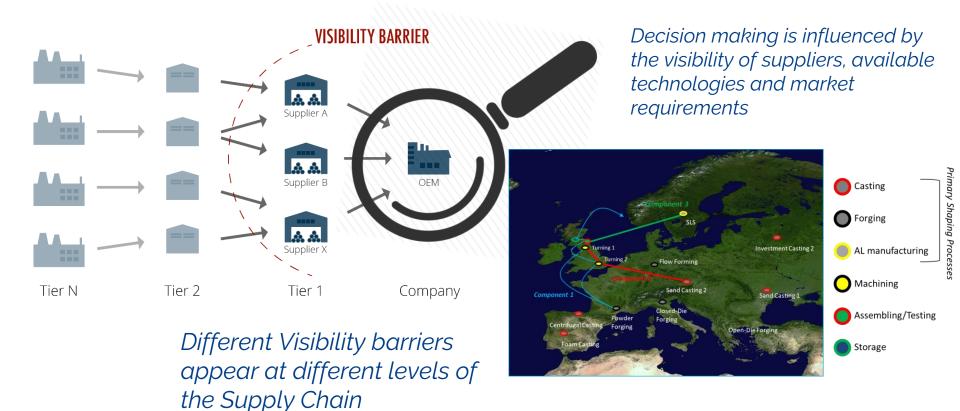




Supplier Capabilities are **DECISIVE!**

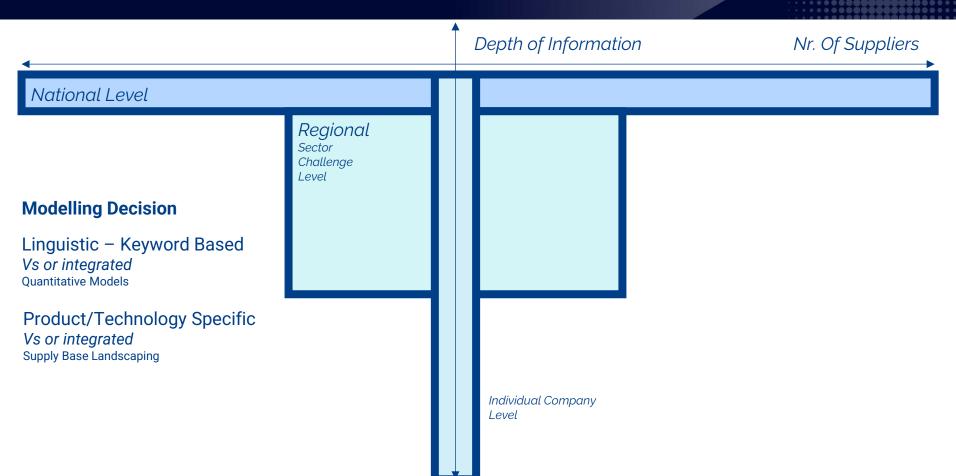
Supply Chain: Visibility and Decision Making





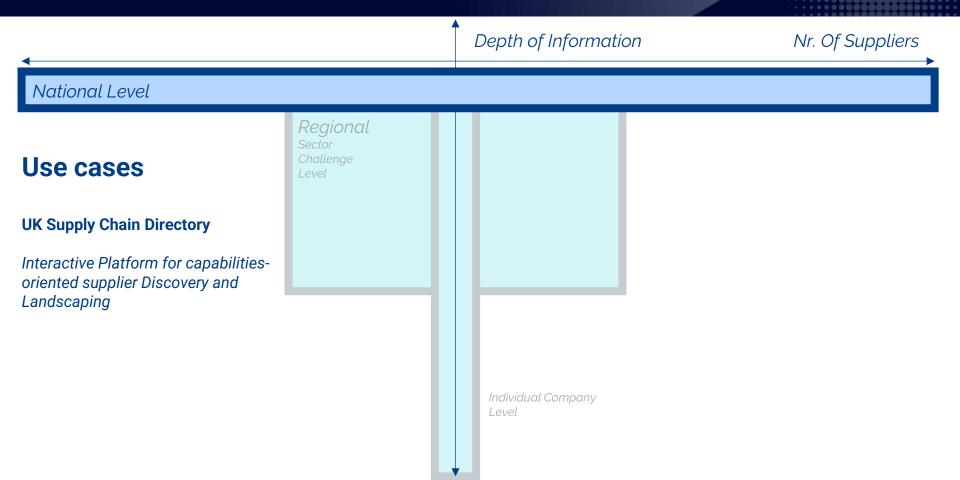
The SC Information Dilemma





UK National Level





UK Supply Chain Directory - Vision



Government and Innovation Centre stakeholders

The free to use supply chain directory tool will act as a one stop shop on company information, we will bring stakeholders together to provide a digitally enabled consensus view of the truth. It will be a perpetually updated, simple to use cloud-based system which will enable you to gain increased visibility of the UK manufacturing sector and make the right actionable insights

Manufacturers and Trade Body stakeholders

The free to use supply chain directory tool will act as a one stop shop on company information, enabling you to easily find companies to compliment your business; via sector, technology or geography. Unlike other systems, we are not only limited to SIC codes either, we have expertly crafted sector groupings enabling you to manage supply chain risks and match supply and demand by identifying the right suppliers and customers quickly and easily.

UK Supply Chain Directory – User Needs



A platform that enhances connectivity and efficiency across the UK supply chain ecosystem by targeting needs with actionable insights to build resilience into industrial Supply Chains for:

- 1. Manufacturing companies and industrial suppliers: Boosts visibility and allows easy updates to profiles for accurate capability representation. Provides representation and capability insights, supporting growth, supply opportunities and investment attraction.
- 2. Original Equipment Manufacturers (OEMs), Buyers and Product-makers: Facilitates quick, efficient supplier discovery process to match manufacturing and technologically oriented supplier discovery.
- 3. Trade Bodies, Sector Bodies, RTOs and HVMC centres: Offers comprehensive data on UK manufacturing, enabling strategic clustering and attracting foreign and domestic investments.
- 4. Government/Funding bodies and HVMC: Delivers accurate manufacturing insights at sectoral, regional, and national levels, aiding policy decisions and fostering collaboration for industrywide value creation.

UK Supply Chain Directory – User Needs

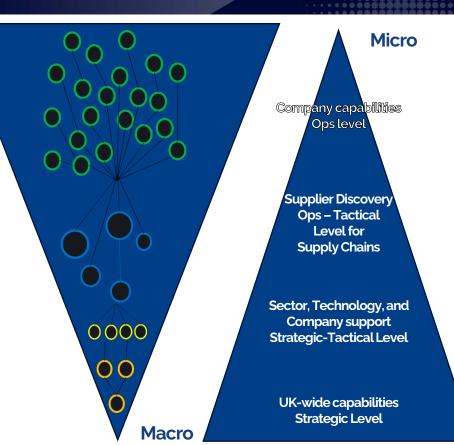


 Manufacturing companies and industrial suppliers

2. Original Equipment Manufacturers (OEMs), Buyers and Product-makers

3. Trade Bodies, Sector Bodies, RTOs and HVMC centres:

4. Government/Funding bodies and HVMC



UK Supply Chain Directory



https://uksupplychaindirectory.com





Current registered users: 720 **Companies claimed:** 58

Key Achievements:

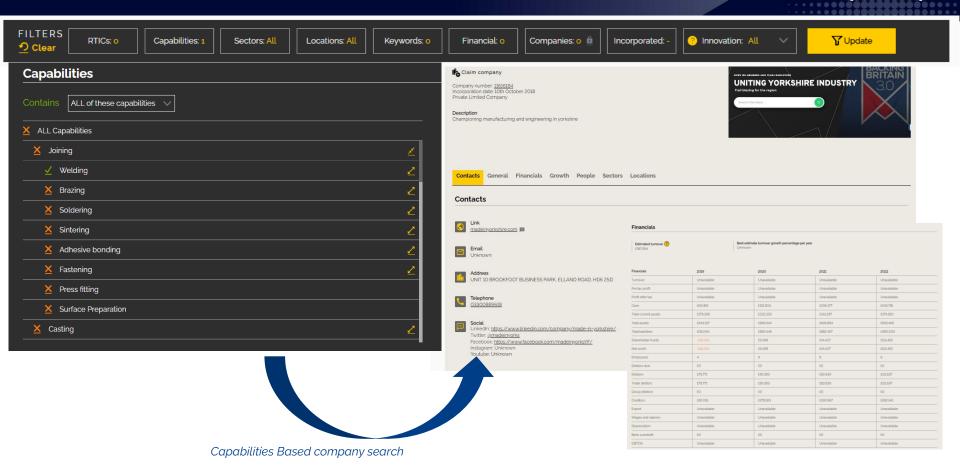
- v2.0 developed and currently up and running (free to use)
- Tested by several users, focus groups and early adopters (HVMC member companies and partner organisations)
- Developing of testing routines against user centric specification
- Company Classification and Search developed

Core Features:

- Over 280,000 company profiles available.
- A wide range of filters including over 300 company classification including manufacturing capabilities, sectors, locations, financials, etc.
- Instant website text filtering.
- Company claiming. Users can claim a company through automatic or manual approval (depending on information provided).
- Company profile editing. Once claimed, users can edit specific fields including Capabilities, Turnover, Number of employees, emails etc.
- Ability for users to request a download of search results.
- Company contact information available (where applicable).

UK Supply Chain Directory





UK Supply Chain Directory

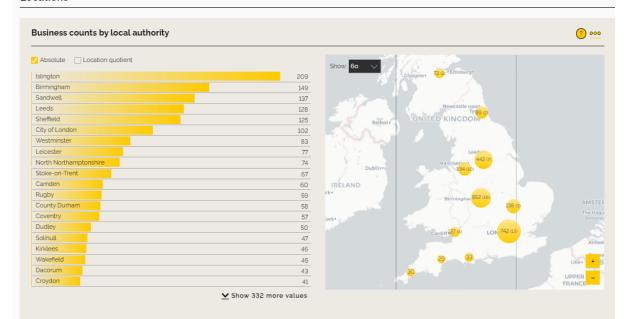


Suppliers Landscaping

Example
Casting companies



Locations



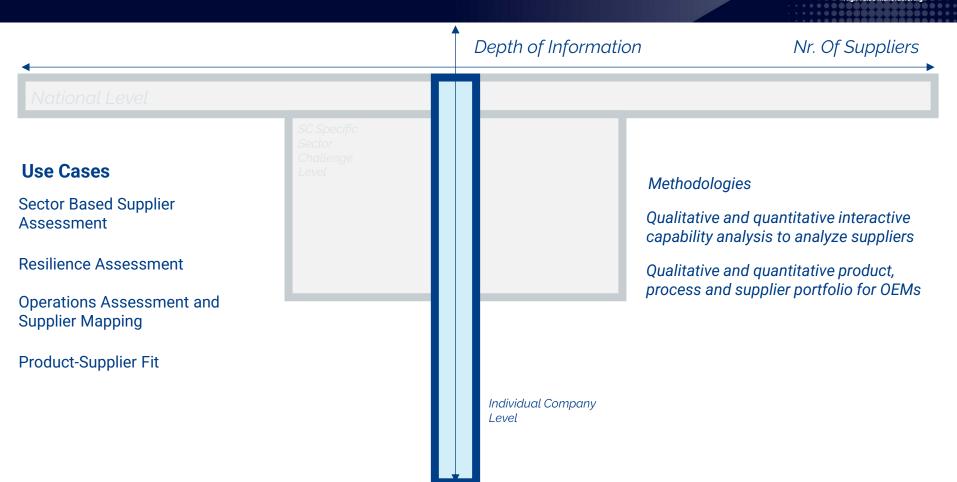
The SC information Dilemma - SC Challenge Level





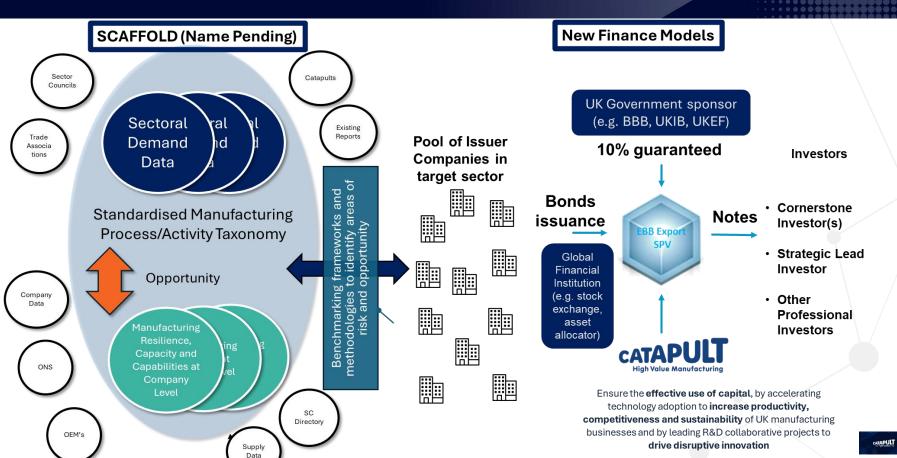
The SC information Dilemma - Company level





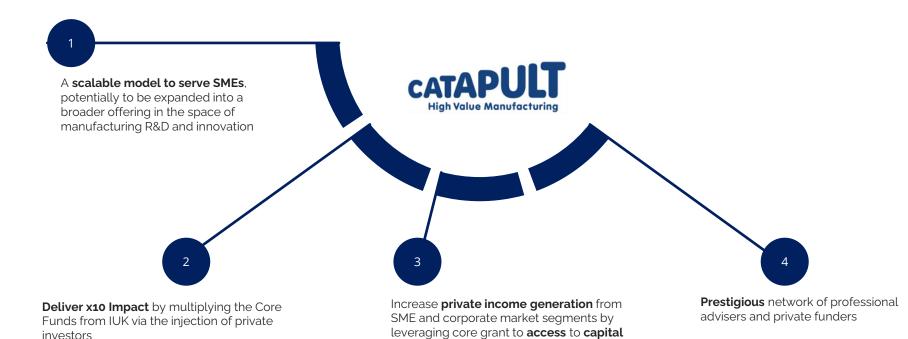
Supply Chain and Access to Finance





Benefits to HVMC





and a high-impact programme for growth

Call to action and Support for HVCM SC Directory



- Register and use the directory at: https://uksupplychaindirectory.com/
- Test the directory and give us at feedback to improve and highlight potential use case
 - Help us <u>differentiate</u> from our competitors
 - Give us <u>feedback</u> and improvements
 - Let us know what other <u>use cases</u> you would expect to see
- Help us disseminating the Supply Chain Directory and aiding the UK manufacturing sector to grow:
 - Manufacturing companies: claim their profile and increase visibility
 - Public bodies and local authorities, Trade and Sector bodies
 - Product makers and OEMs to discover suppliers





EngD, MBA, CEng, MIET, MIMechE

Supply Chain and Operational Transformation Lead @ NMIS

Supply Chain SPG Chair @ HVMC

Anchoring Innovation Manager @ University of Strathclyde

daniele.marini@strath.ac.uk







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Net Zero by 2050: Tracking Green Growth in the North



01

Transforming transport connectivity

02

Driving Innovation

03

Closing the disadvantage gap

04

Unlocking skills and training opportunities

05

Powering the net zero transition

Significance of the North's Net Zero Transition



Northern Powerhouse Independent Economic Review



£23 BILLION ADDITIONAL GVA



168,000 ADDITIONAL JOBS



£1,500 PRODUCTIVITY BOOST PER WORKER

NPIER Aims



DEVELOP AN OVERVIEW OF THE NET ZERO ECONOMY AND ITS SCALE IN THE NORTH



MAP OUT CURRENT CLUSTERS
AND OPPORTUNITIES FOR
GREEN GROWTH



UNDERSTAND THE SCALE OF THE CARBON INTENSIVE ECONOMY IN THE NORTH

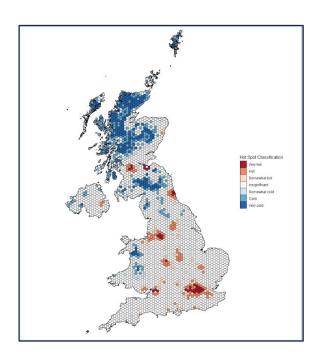
Methodology

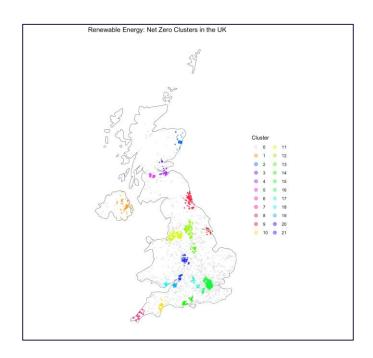
We had two main tasks to complete: **mapping the Net Zero sector** and **finding relevant concentrations of companies** across the UK to understand the North's strengths.

We applied three different methods to produce the results:

- Real-Time Industrial Classification (RTIC) methodology: we group companies that describe their
 activity similarly on their website using machine learning. It makes it possible to create datasets of
 companies that represent different sectors and query all the appended data available at the
 company level. Location data is included, enabling the geographic analysis of sectors.
- Hot Spot Analysis: using the company location data, we found statistically significant areas of either high or low concentrations of companies.
- Clustering: we used the HDBSCAN clustering algorithm to identify company locations that form highdensity clusters, standing out compared to the density of surrounding companies.

Methodology





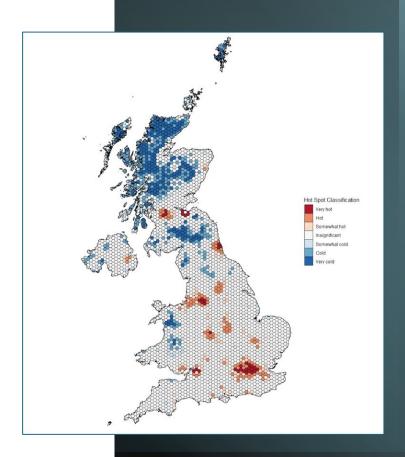
Key Findings of the Overall Net Zero Economy

UK

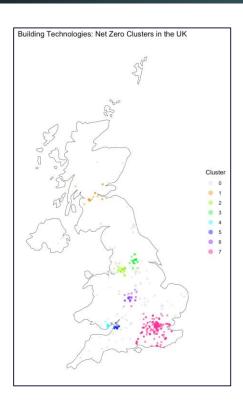
- 22,500 registered companies in the UK operating across 51,000 sites
- 685,000 jobs
- £56bn in GVA

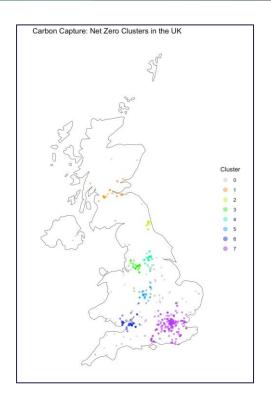
Northern Powerhouse

- 10,000 of those sites are in the NPH
- 140,000 jobs
- £11.5bn GVA

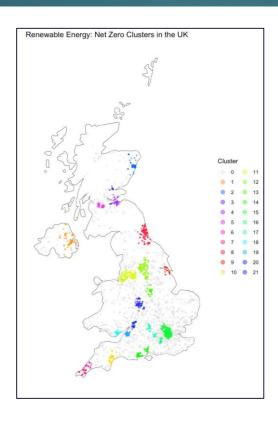


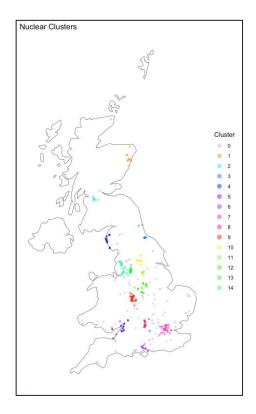
Key Findings of Net Zero Clusters





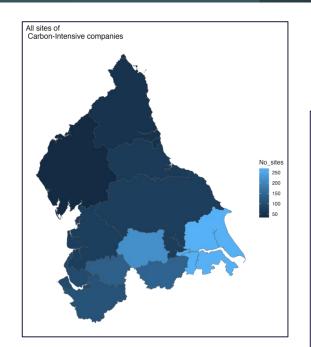
Key Findings of Net Zero Clusters

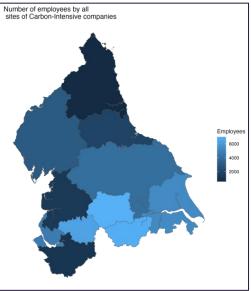




Key Findings of the Carbon Intensive Economy

- 1,262 operational sites in the North which represents nearly 20% of carbon intensive sites in the UK.
- 42,000 employees which represents
 12% of total UK employees in this.
- Average productivity rate is £108,000 GVA per job across the North.
- £85mn in turnover





Policy Recommendations

Energy

- Complete procurement by Great British Nuclear from two separate businesses of three small modular reactors (SMRs) each.
- Develop our wind capabilities from the North East down to the Humber.
- Invest in a turbine supply chain for the tidal barrage on the Mersey.

Industry

- Continue to make huge strides in carbon capture use and storage (CCUS).
- Expand green hydrogen production, storage and distribution.

Transport

- Turn the North into a centre for the production of Sustainable Aviation Fuel (SAF).
- Deliver a consistent programme of rail electrification.
- We make the UK a leader in building battery and hydrogen trains.
- Guarantee the supply of hydrogen for commercial vehicles such as buses.
- Increase procurement of electric and hydrogen buses across areas with franchising.

Built Environment

• Deliver retrofit of domestic and commercial buildings at pace, and with the necessary funding and skills support.

Land Use

• Back propositions including the Northern Forest.

Let us know what your ambition for the North is:

- Follow us on Twitter: @NP_Partnership
- Follow us on Instagram: @northernpowerhousepartnership
- Like us on LinkedIn: The Northern Powerhouse Partnership
- Like us on Facebook: The Northern Powerhouse Partnership







Understanding our Economy to Drive Investment

Joshua Hawkins, Head of Global & Investment, Midlands Engine *Joshua.Hawkins@midlandsengine.org*

Lukasz Gasienica-Fronek, Analyst, Midlands Engine Observatory *lukasz.gasienica-fronek@theeiu.org*

November 2024

- 1. Introductions
- 2. Clusters
- 3. Innovation & Growth
- 4. Local Insight



MIDLANDS ENGINE PARTNERSHIP

Harnessing our collective power to achieve more for our region

Advocating

Convening

Evidencing

Focusing on the strategic drivers for the Midlands Economy:





Innovating across sectors





Increasing Trade & Investment

Creating strong links with our partners across key regional sectors:

Clean Growth Advanced Manufacturing Food & Agri-Tec

Med-Tech & Life Sciences New Market Opportunities

MIDLANDS ENGINE



- 11 million people
- 65 local authorities
- 20 universities
- 405,000 businesses
- 48,395 incorporations 2022-23
- £277.2bn GVA
- £97.1bn productivity gap

The Midlands Engine Observatory provides:

- A robust evidence base to fortify strategic and economic cases for Treasury green book business case development.
- Economic modelling, featuring baseline forecasts up to 2050 for each Local Authority, encompassing scenario development and economic impact assessments at the intervention level.
- Assistance with local economic assessments.
- Support for sector and cluster analysis at the local level, complete with detailed sector and cluster profiles.
- **Spatial analysis, geo-visualisation** and the creation of dynamic presentations to highlight place-based opportunities.
- In-depth labour market analysis.

Our comprehensive offering ensures a thorough exploration of economic landscapes, providing the necessary tools for informed decision-making and strategic planning across every step of the way.





- Flagship report and subsequent programme of activity
- Maps economic strengths, building on partners' focus
- Investment potential inferred through growth, comparative advantage and market share across 27 metrics
- Analytical framework presents clusters through four ecosystems: business, talent, innovation, and investment
- Deep dives with businesses & policymakers to articulate investment opportunity in key clusters







East Midlands Freeport **UK Investment Atlas** High Potential Opportunity Area



Net zero transport in Coventry and Warwickshire **UK Investment Atlas High** Potential Opportunity Area



CAM modelling and simulation in Oxfordshire and the Midlands UK Investment Atlas Net-Zero Investment Opportunity



Space in Leicester and Leicestershire UK Investment Atlas High Potential Opportunity Area



5G technology in Worcestershire **UK Investment Atlas** High Potential Opportunity Area



Cyber security in Gloucestershire **UK Investment Atlas High Potential Opportunity Area**



Video games in Coventry and Warwickshire **UK Investment Atlas High Potential Opportunity Area**

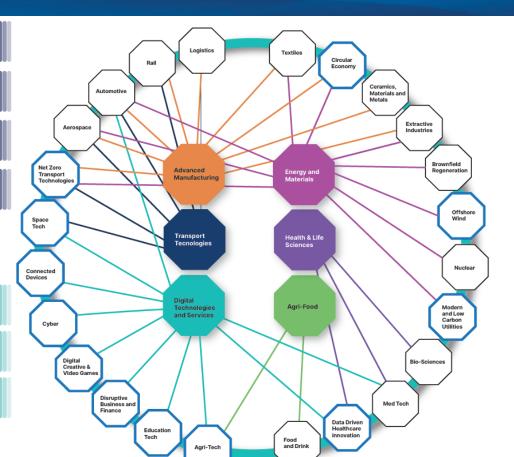


Midlands Super Cluster/ **Key Sector**

Midlands Established Cluster

Midlands New Economy Cluster

UK Investment Atlas initiative linked to one or more Midlands clusters



Humber Freeport **UK Investment Atlas** Freeport



Circular economy in Telford **UK Investment Atlas Net Zero FDI Opportunity**



Offshore wind supply chain and ports in Teesside and the Humber UK Investment Atlas High Potential Opportunity Area



Rehabilitation in Leicester and Leicestershire UK Investment Atlas High Potential Opportunity Area



Charnwood Campus Science, Innovation and Technology Park Life Science Opportunity Zone



Data-driven health innovation in Greater Birmingham and Solihull UK Investment Atlas High Potential Opportunity Area Life Science Opportunity Zone





Sustainable farming systems in

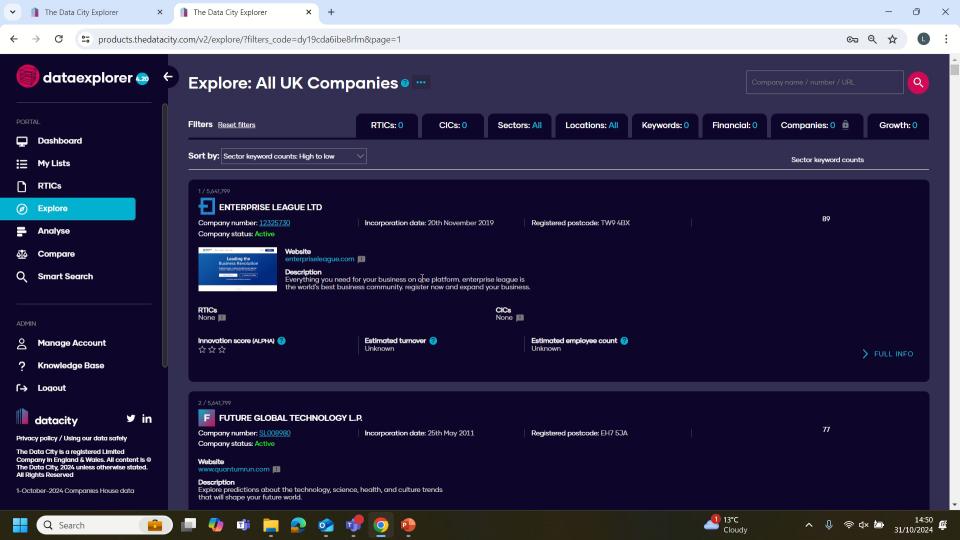












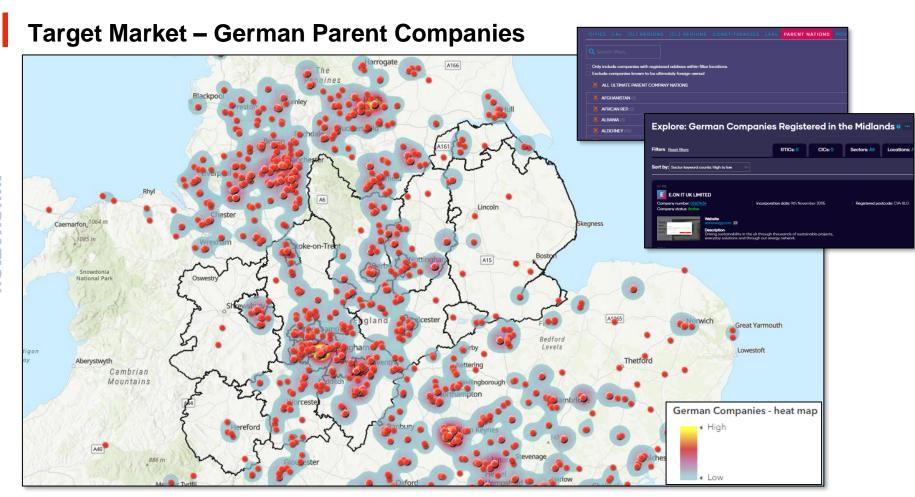
- IP rich & high innovation businesses = higher productivity
- Understanding & maturing the innovation ecosystem
- Articulating the ecosystem to retain, grow & attract investment

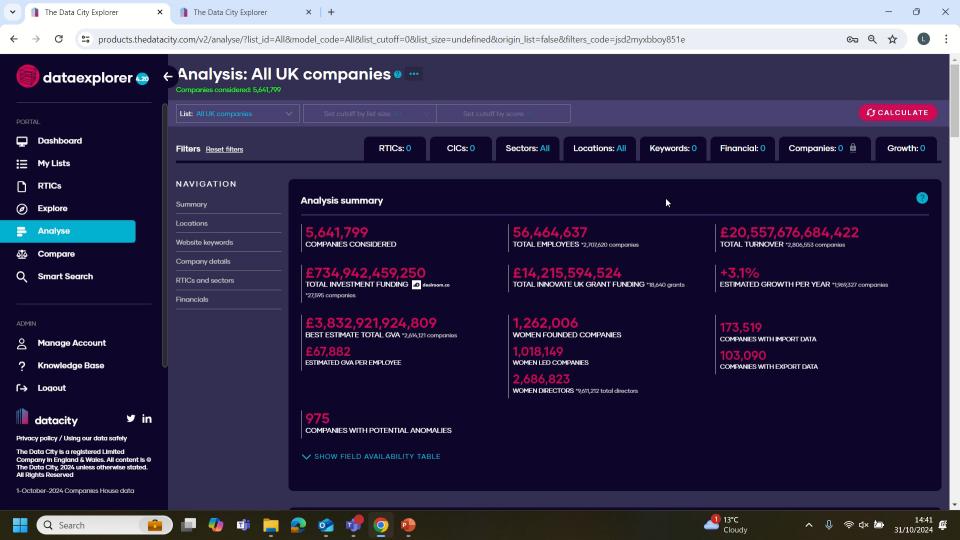
 Flagship project with 17 universities, involving 20+ science parks



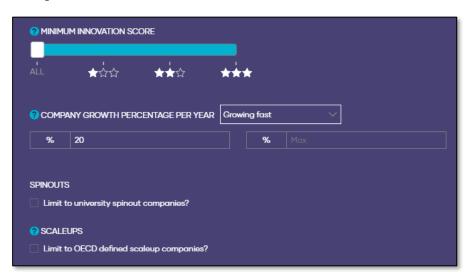
Universities in the Midlands – major R&D assets







High Growth, High Innovation Companies



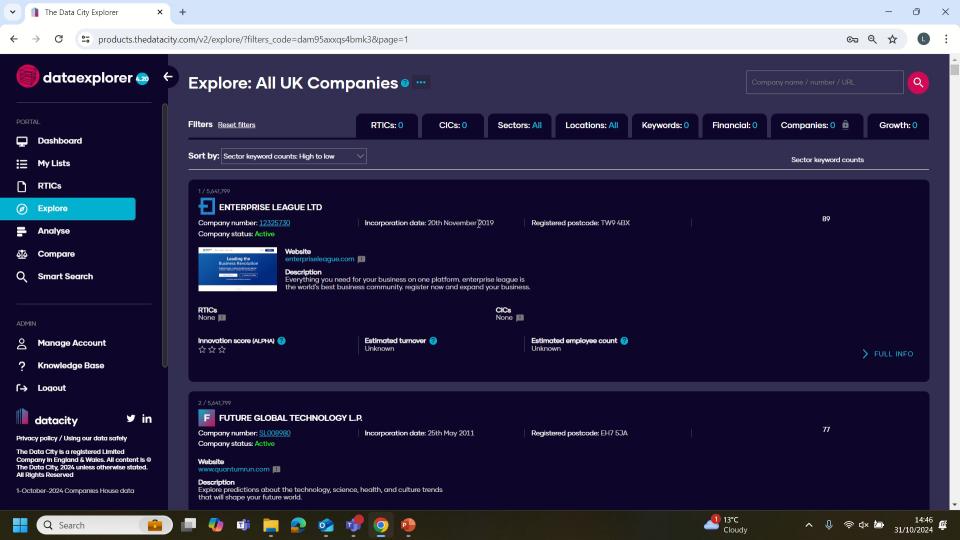
Target High-Growth Companies:

Identify Cluster Activity

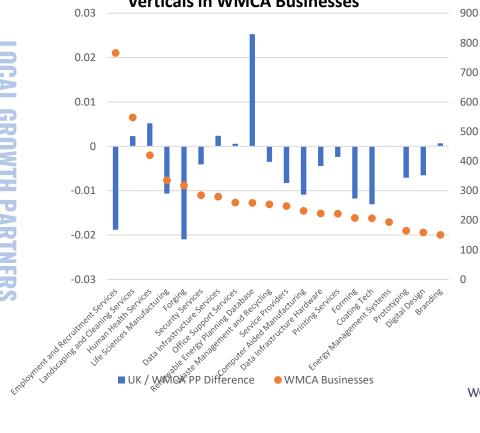
Target Innovative Companies:

- Inward/Outward Trade and Investment Missions
- University Engagement
- University Spinouts

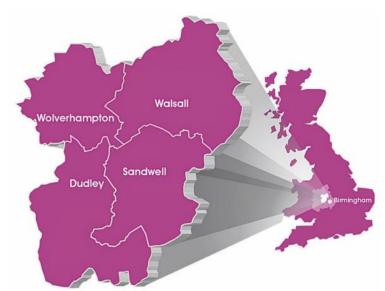




Common and Highly Concentrated RTIC Verticals in WMCA Businesses















MIDLANDS ENGINE

Trent Bridge House Fox Road West Bridgford Nottingham NG2 6BJ

info@midlandsengine.org



Thank you



Thanks for coming!

Time for a drink.