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Session IV: Boosting innovative business models and economic connectivity in the digital era
Dr. George Windsor, Tech Nation, United Kingdom

EEF.NGO/21/18
7 September 2018

ENGLISH only

Boosting innovative business models and economic connectivity in the digital era: evidence from the UK tech sector

Dr. George Windsor
Tech Nation

6th September 2018

TECH NATION

#WeAreTechNation

5 Pillars:

1) International competitiveness
2) Digital tech business
3) Community perceptions
4) Collaboration, connectivity and culture
5) Jobs and skills

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BARCLAYS   EY Building a better working world   JLL

#WeAreTechNation
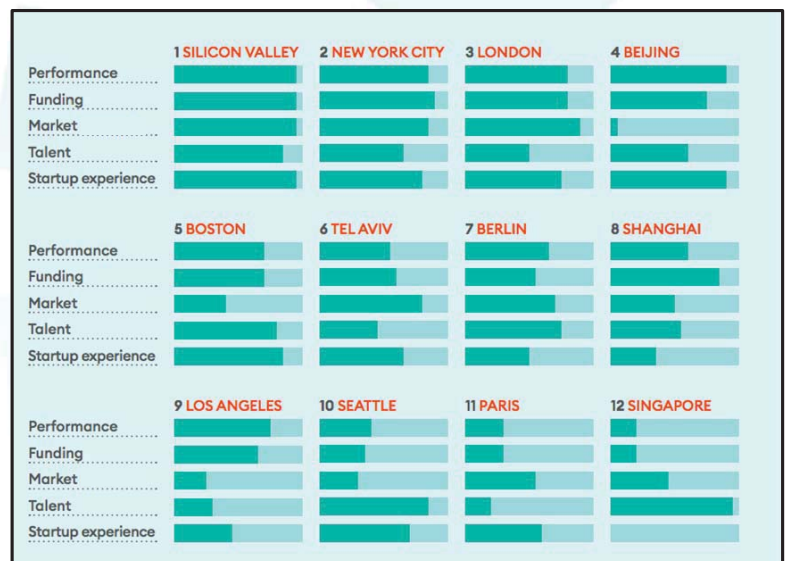
1. International competitiveness

The UK cements its position as a global tech leader

LONDON SECURES ITS POSITION AS 3RD GLOBAL TECH STARTUP ECOSYSTEM

In London 33% of tech company customers are based outside the UK, compared to 30% in Silicon Valley and 7% in Beijing.

Performance of the top 12 global tech startup ecosystems
Source: Startup Genome, 2017

	1 SILICON VALLEY	2 NEW YORK CITY	3 LONDON	4 BEIJING
Performance				
Funding				
Market				
Talent				
Startup experience				

	5 BOSTON	6 TEL AVIV	7 BERLIN	8 SHANGHAI
Performance				
Funding				
Market				
Talent				
Startup experience				

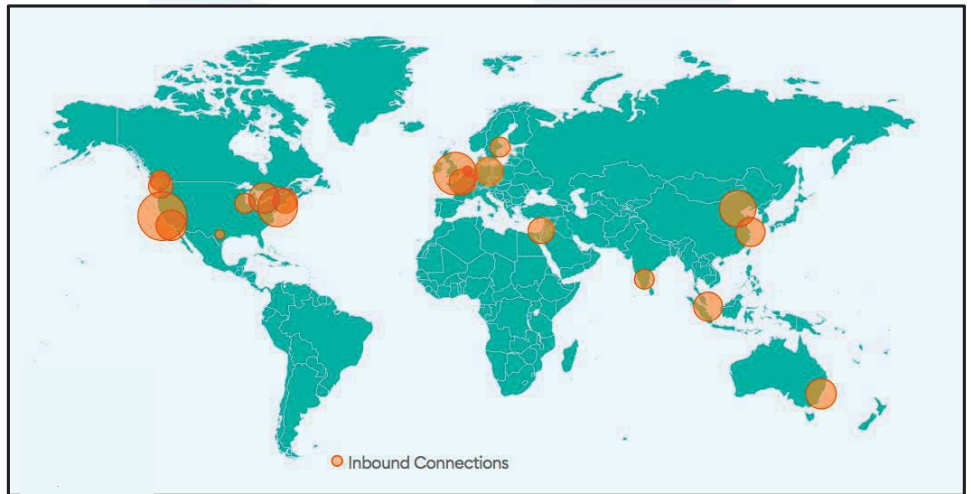|	9 LOS ANGELES	10 SEATTLE	11 PARIS	12 SINGAPORE
Performance				
Funding				
Market				
Talent				
Startup experience				

Global connections are key to domestic success

LONDON IS THE SECOND MOST CONNECTED ECOSYSTEM IN THE WORLD

25% of the world's entrepreneurs report a significant relationship with two or more others based in London, a figure beaten only by Silicon Valley.

Inbound connections for the top 20 global tech ecosystems

Source: Startup Genome, 2017

Inbound Connections

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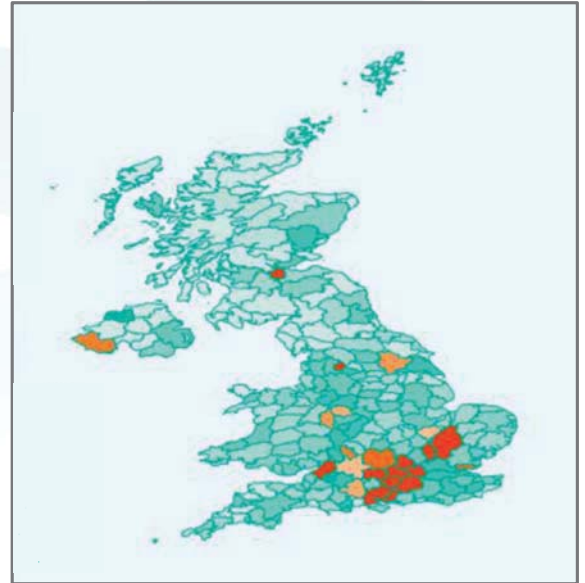# 2. Digital tech business

The UK has digital suburbs, not just cities

DIGITAL SUBURBS UNCOVERED ACROSS THE UK

London's digital density is below the UK average at 0.92, while Newbury at 15.5 is the most tech specialised local economy in the UK.

Digital tech density in Travel to Work Areas across the UK

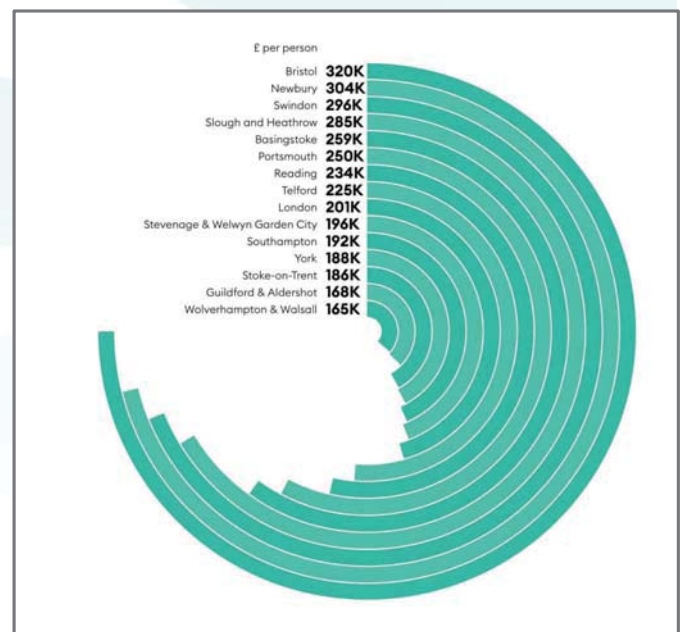Source: Tech Nation, 2018; ONS, Business Structure Database, 2017

Digital tech hotspots have high productivity

BRISTOL TOPS PRODUCTIVITY OF LOCAL TECH ECOSYSTEMS

There is a productivity power path from London to the mouth of the River Severn, running along the M4 corridor and spreading to Southampton and Portsmouth

Productivity (£ per person), turnover by employee for the top 15 UK Travel to Work Areas

Source: ONS Business Structure Database, 2017

£ per person

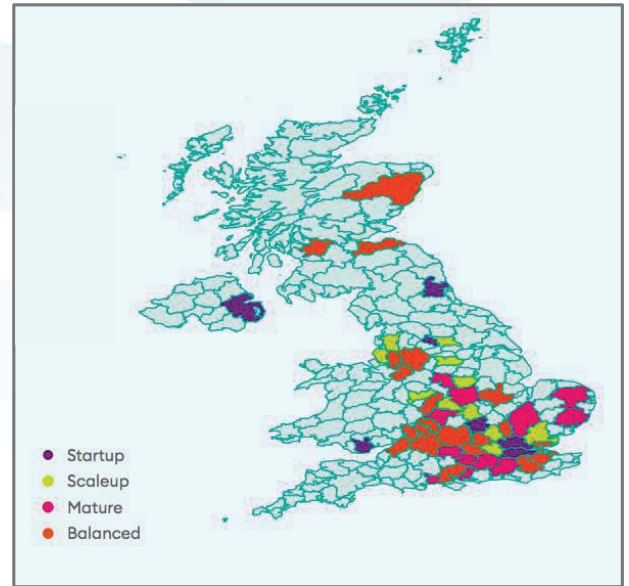| Area	£ per person
Bristol	320K
Newbury	304K
Swindon	296K
Slough and Heathrow	285K
Basingstoke	259K
Portsmouth	250K
Reading	234K
Telford	225K
London	201K
Stevenage & Welwyn Garden City	196K
Southampton	192K
York	188K
Stoke-on-Trent	186K
Guildford & Aldershot	168K
Wolverhampton & Walsall	165K

Healthy mix of growth stages across the UK

A HIGH PROPORTION OF CLUSTERS WITH A BALANCE OF COMPANY GROWTH STAGES SUGGESTS A HEALTHY UK ECOSYSTEM

Call The highest proportion of clusters (36%) emerged as balanced ecosystems, 26% are scaleup dominant, and 12% startup dominant

Age distribution of companies in Travel to Work Areas across the UK

Source: Tech Nation, 2018; ONS, Business Structure Database, 2000-2016

Legend:
- Startup
- Scaleup
- Mature
- Balanced

3. Community perceptions

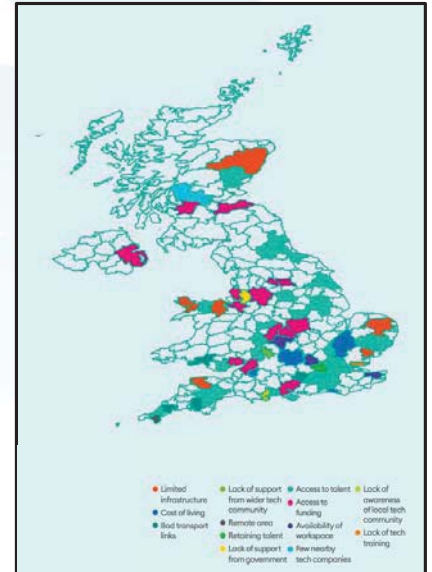# Access to talent and investment continue to challenge tech communities across the UK

KEY CHALLENGES PERCEIVED BY THE LOCAL TECH COMMUNITY

In 83% of clusters, the tech community cited access to talent as their biggest challenge.

Strengths of local tech ecosystems

Source: Tech Nation and Streetbees, 2018

1. Access to talent

2. Access to funding

3. Bad transport links

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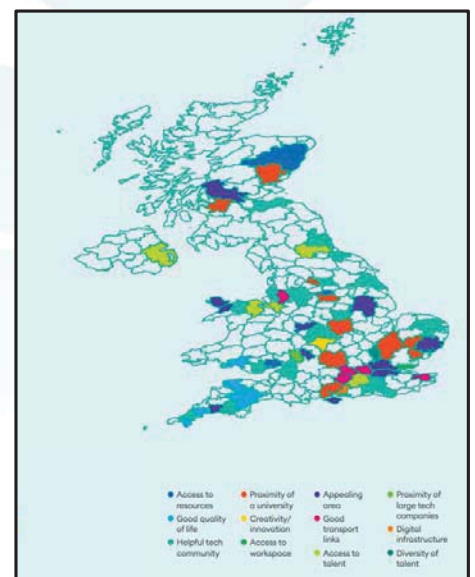# UK tech communities value quality of life and sense of place

KEY STRENGTHS PERCEIVED BY THE LOCAL TECH COMMUNITY

Communities identified the top ecosystem strengths as: 1) appealing area; 2) a helpful tech community; 3) proximity to a university.

Challenges of local tech ecosystems

Source: Tech Nation and Streetbees, 2018

1. Appealing area

2. A helpful tech community

3. Proximity to a university

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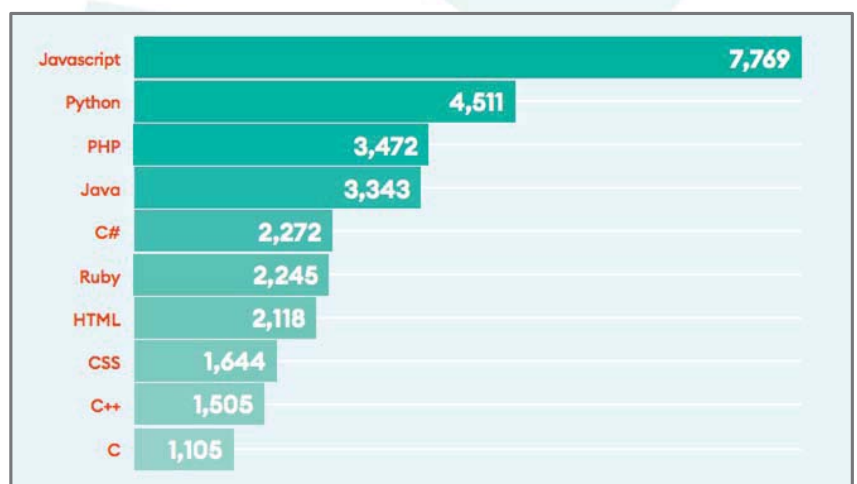# 4. Collaboration, connectivity and culture

UK software developers are highly collaborative

GITHUB SHOWS HOW UK TECH DEVELOPERS SHARE CODING LANGUAGES

Data on 52,000 UK Github users reveals important, often hidden, ways that developers collaborate. Languages associated with web development are prevalent, the top three are JavaScript, Python and PHP.

Top programming languages used on Github, by number of users
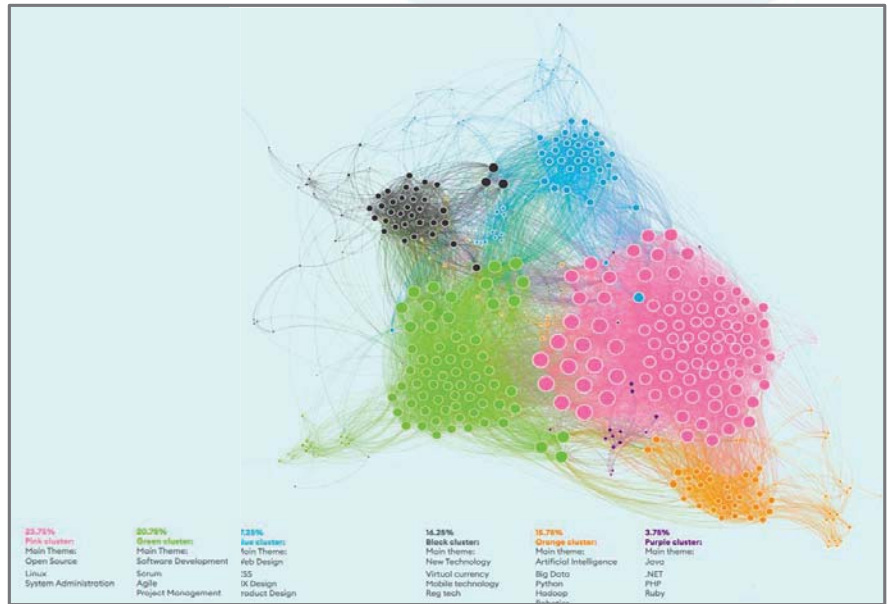
Source: Tech Nation, 2018; Github, 2018

Language	Users
Javascript	7,769
Python	4,511
PHP	3,472
Java	3,343
C#	2,272
Ruby	2,245
HTML	2,118
CSS	1,644
C++	1,505
C	1,105

The UK tech community is highly connected

Top 400 meetups highlight emerging trends, watch out for AI and blockchain as they take centre stage in the conversation

Top 400 tech meetup groups by membership in the UK 2018

Source: Tech Nation, 2018; Meetup.com, 2018

5. Jobs and skills

Jobs in digital tech are on the rise

THE MORE DIGITALLY SKILLED A UK JOB IS, THE HIGHER ITS AVERAGE ANNUAL SALARY

From 2014 to 2017 digital tech sector employment rose 13.2%. Its workers are more productive, on average, by £10,000 per worker. Jobs requiring digital tech skills command higher salaries, at £42,578 compared to £32,477 for those that do not.

Digital native	£42,578
Digitally enabled	£35,277
Non- digital	£32,477

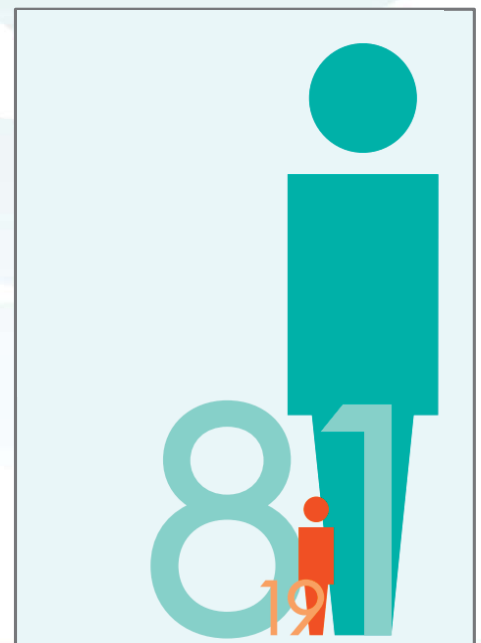**Average annual salary of jobs**   Source: Adzuna, 2018

Diversity remains a key challenge for digital tech

WOMEN IN TECH ARE OUTNUMBERED 4:1

Only 19% of the digital tech workforce is female. Despite the stereotype that digital tech jobs are for millennials, 72% of workers are aged over 35.

Gender diversity of people working in digital tech jobs, 2017

Source: Tech Nation, 2018;
ONS, Annual Population Survey,
Wave 3 2017

Explore the findings online at:

technation.io/report2018

Many thanks for your time
@WindsorGeorge
@TechNation

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