Report Findings

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Report 2018

Connection and collaboration: powering UK tech and driving the economy

1. International competitiveness

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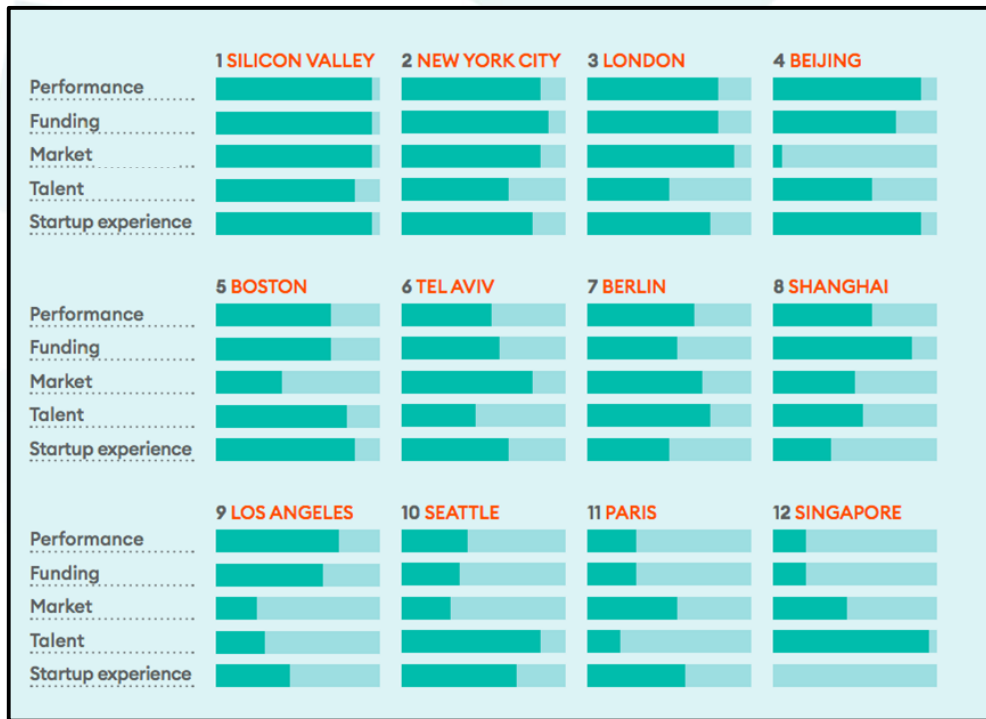
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The UK cements its position as a global tech leader

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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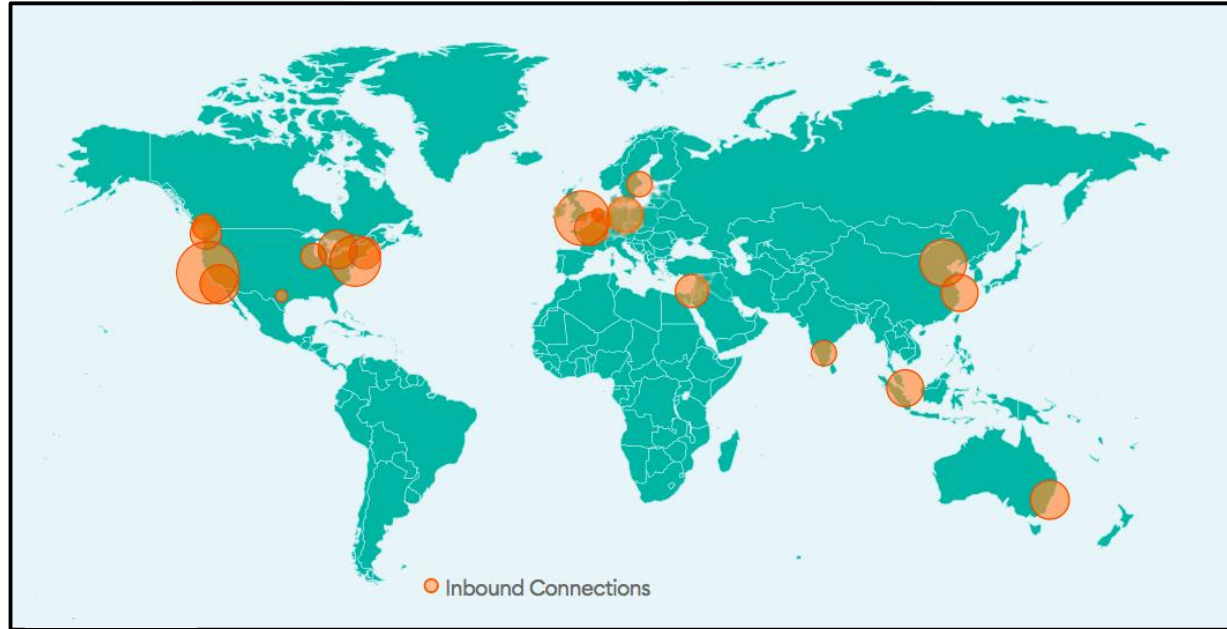
Recommendation
Get support, go international

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

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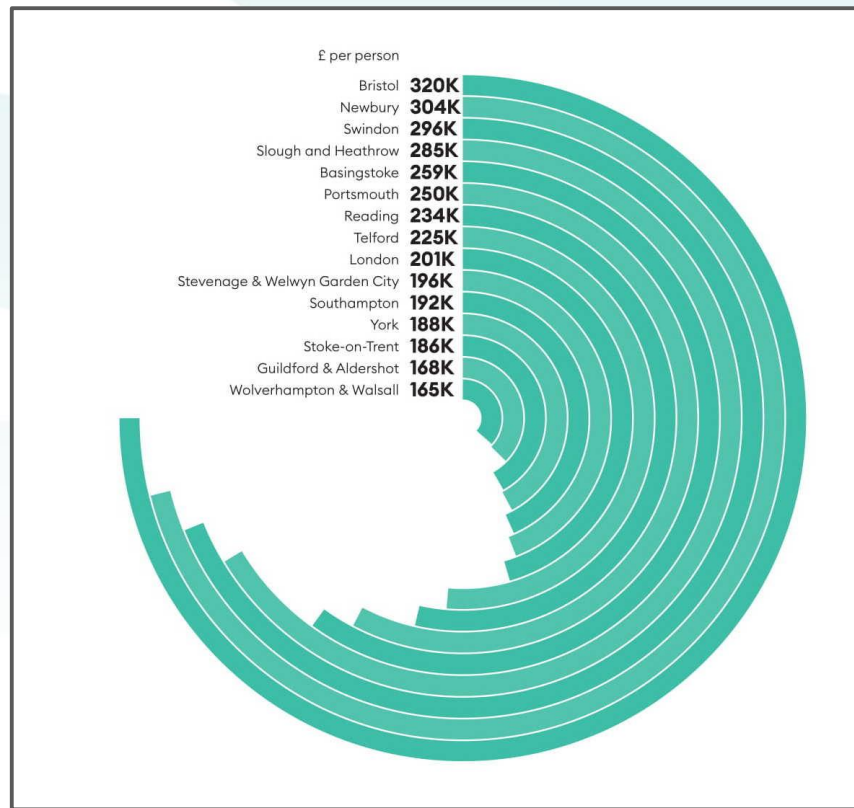
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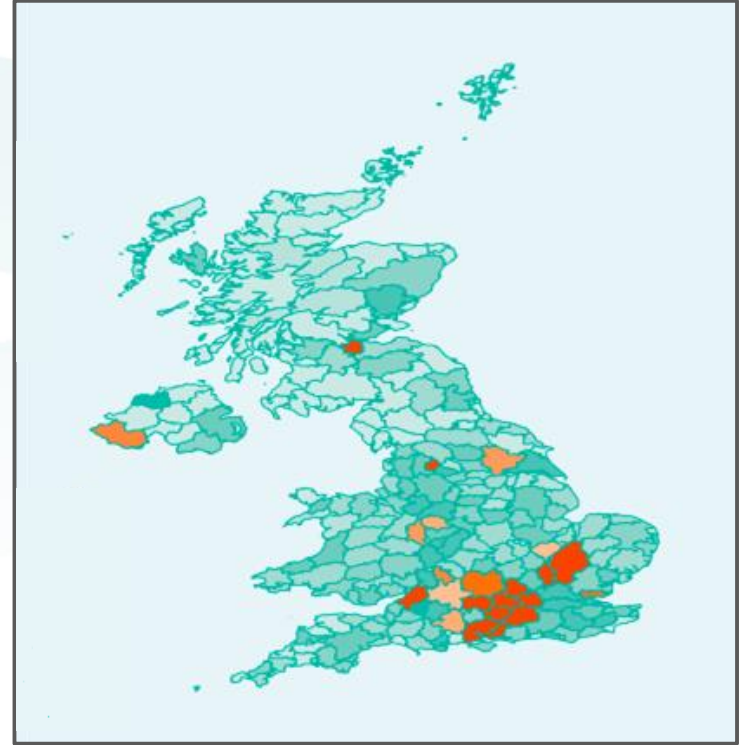
Digital tech hotspots have high productivity

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

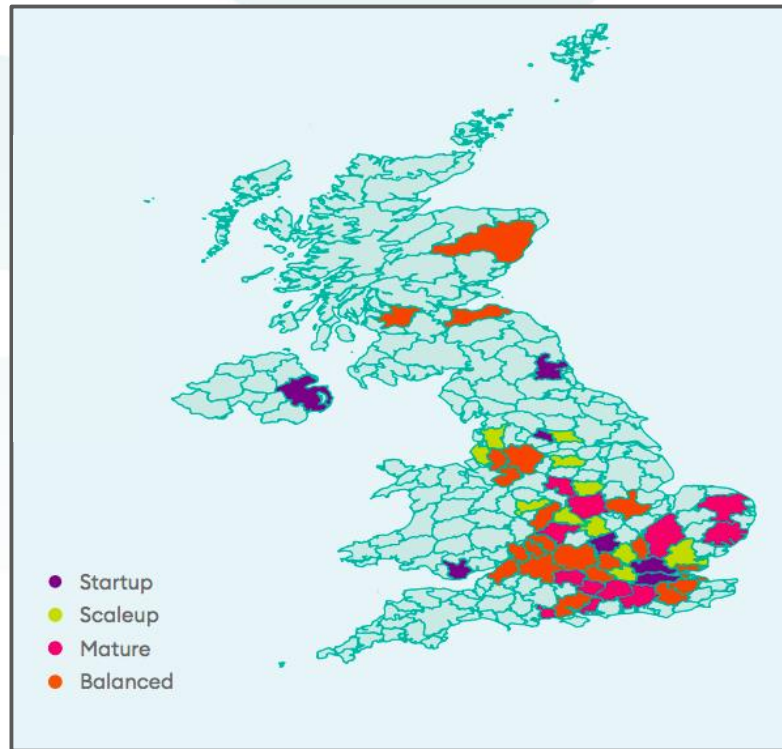| Area	£ per person
Bristol	320K
Newbury	304K
Swindon	296K
Slough and Heathrow	285K
Basingstoke	259K
Portsmouth	250K
Reading	234K
Telford	225K
London	201K
Stevenage & Welwyn Garden City	196K
Southampton	192K
York	188K
Stoke-on-Trent	186K
Guildford & Aldershot	168K
Wolverhampton & Walsall	165K

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

- Startup
- Scaleup
- Mature
- Balanced

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Recommendation
Engage with corporates in new ways

3. Community perceptions

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

KEY CHALLENGES PERCEIVED BY THE LOCAL TECH COMMUNITY

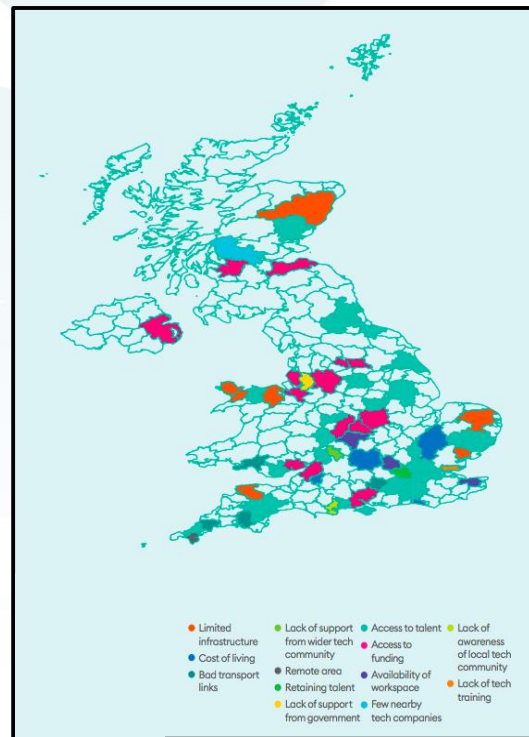**In 83% of clusters, the tech community cited access to talent as their biggest challenge.**

Strengths of local tech ecosystems

Source: Tech Nation and Streetbees, 2018

1. Access to talent

2. Access to funding

3. Bad transport links

- Limited infrastructure
- Cost of living
- Bad transport links
- Lack of support from government
- Lack of support from wider tech community
- Remote area
- Retaining talent
- Few nearby tech companies
- Access to talent
- Access to funding
- Availability of workspace
- Lack of awareness of local tech community
- Lack of tech training

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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.
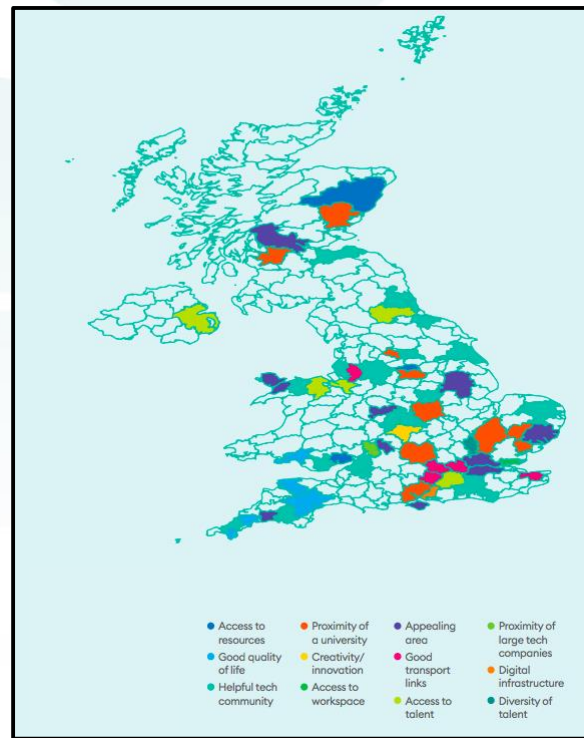
Challenges of local tech ecosystems

Source: Tech Nation and Streetbees, 2018

1. Appealing area

2. A helpful tech community

3. Proximity to a university

- Access to resources
- Good quality of life
- Helpful tech community
- Proximity of a university
- Creativity/ innovation
- Access to workspace
- Appealing area
- Good transport links
- Access to talent
- Proximity of large tech companies
- Digital infrastructure
- Diversity of talent

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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.

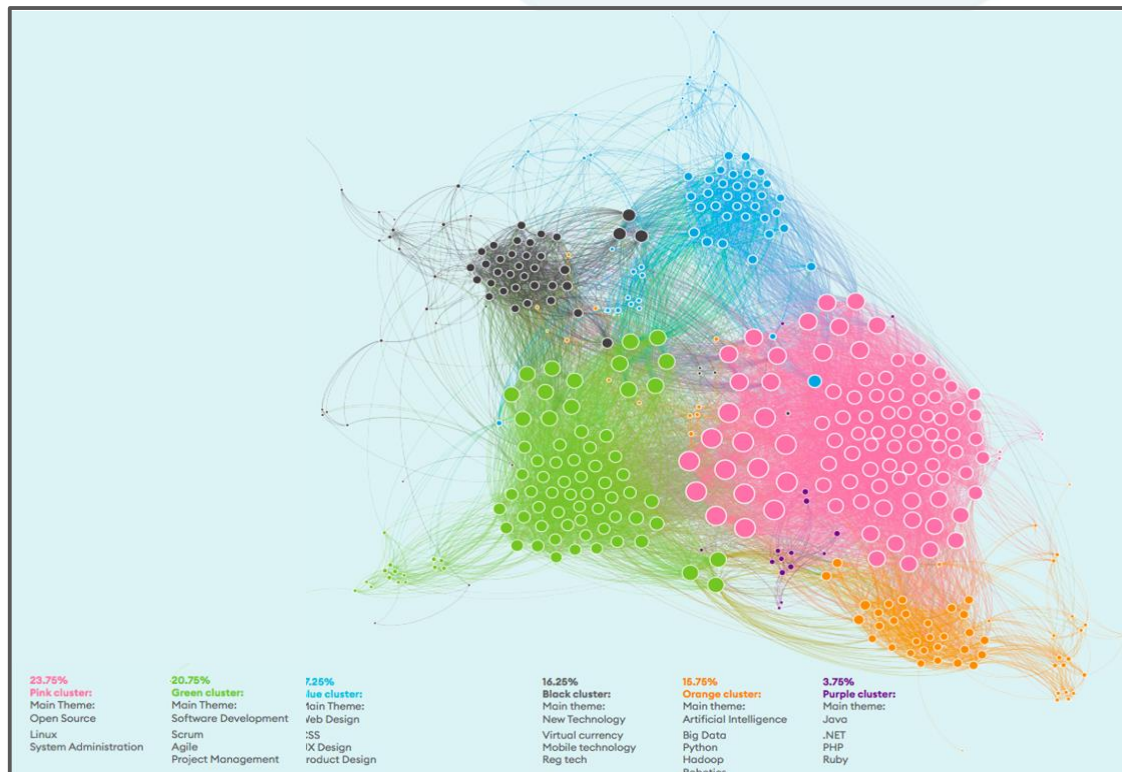**Top programming languages used on Github, by number of users**
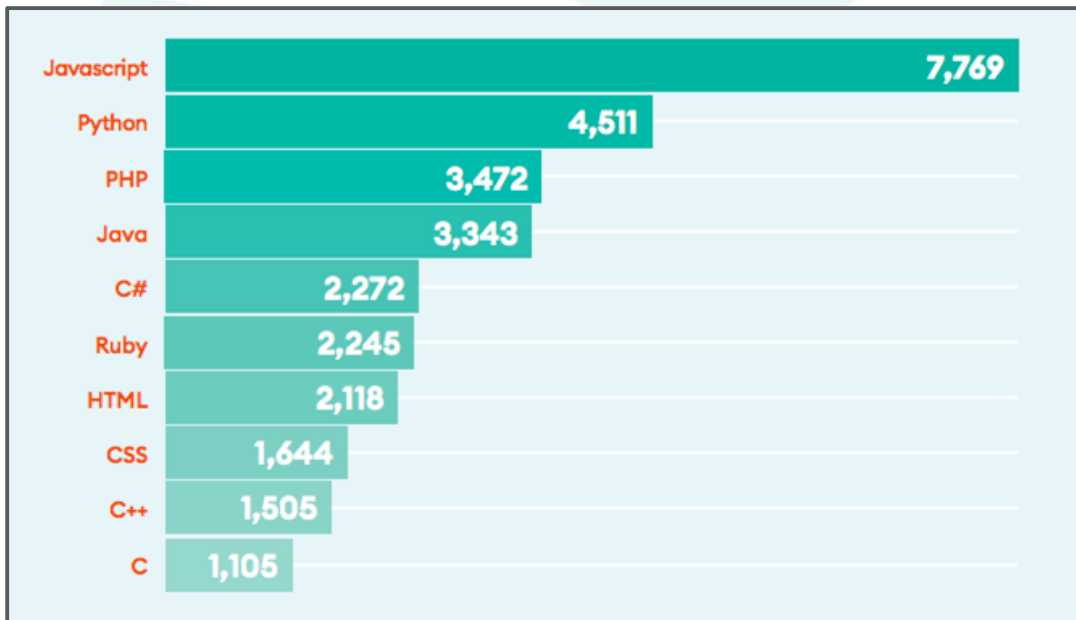
Source: Tech Nation, 2018;
Github, 2018

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

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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

23.75%
Pink cluster:
Main Theme:
Open Source

Linux
System Administration

20.75%
Green cluster:
Main Theme:
Software Development

Scrum
Agile
Project Management

7.25%
Blue cluster:
Main Theme:
Web Design

CSS
UX Design
Product Design

16.25%
Black cluster:
Main theme:
New Technology

Virtual currency
Mobile technology
Reg tech

15.75%
Orange cluster:
Main theme:
Artificial Intelligence

Big Data
Python
Hadoop
Robotics

3.75%
Purple cluster:
Main theme:
Java

.NET
PHP
Ruby

Recommendation
Collaborate to accumulate

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
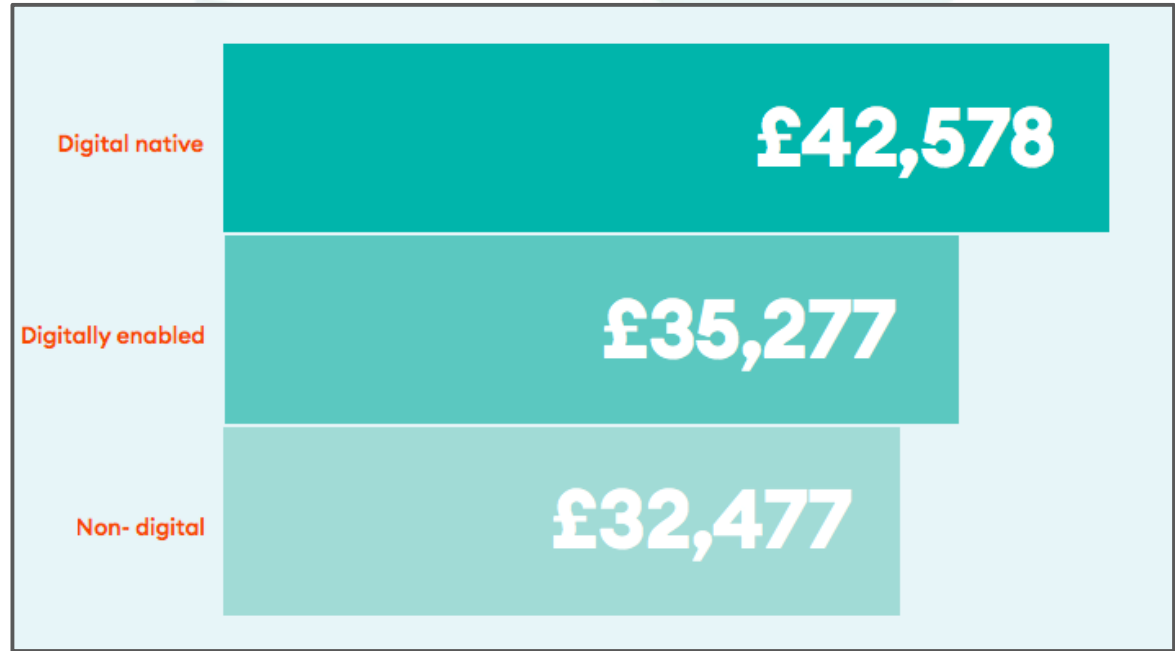
Average annual salary of jobs   Source: Adzuna, 2018

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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

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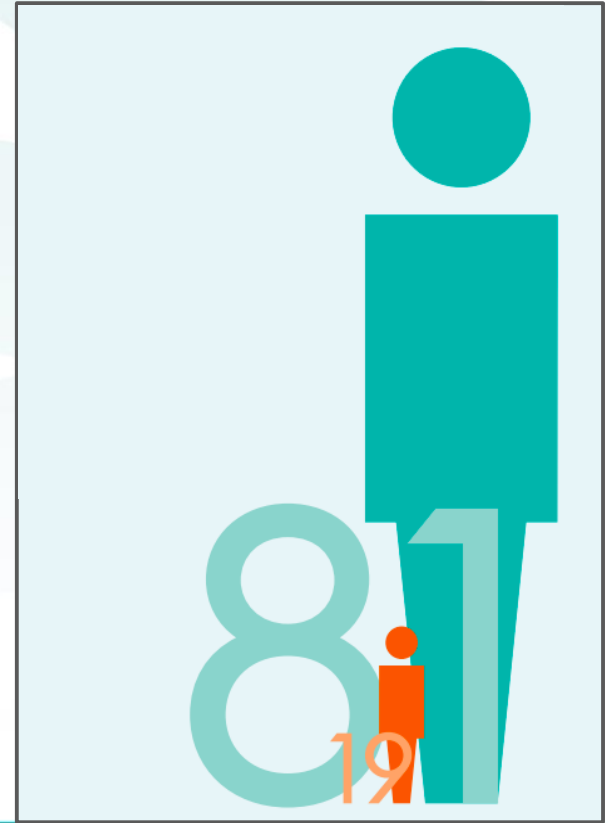
Recommendation
Recruit talent creatively

Tech Nation Report 2018:
Radically Open

Tech Nation Report: Open data

Interested in digital density across the country? Or want to merge your own data? Now is your chance to hack Tech Nation from the inside.

Data.world platform

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Truro and Redruth

Digital tech turnover up by 32% from 2014 to 2017

| Tech Nation Report 2018 ⌄ | | Truro & Redruth ⌄ |

£50 m
Digital tech business turnover (2017)

£70 k
Digital tech turnover by employee (2017)

£93 m
GVA
(2017)

716
Jobs in digital tech sector
(2017)

2,368
Digital tech jobs
(2017)

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What Truro & Redruth startups say is a strength

1	2	3
Helpful tech community	Appealing area	Good internet speed

What Truro & Redruth startups say is a challenge

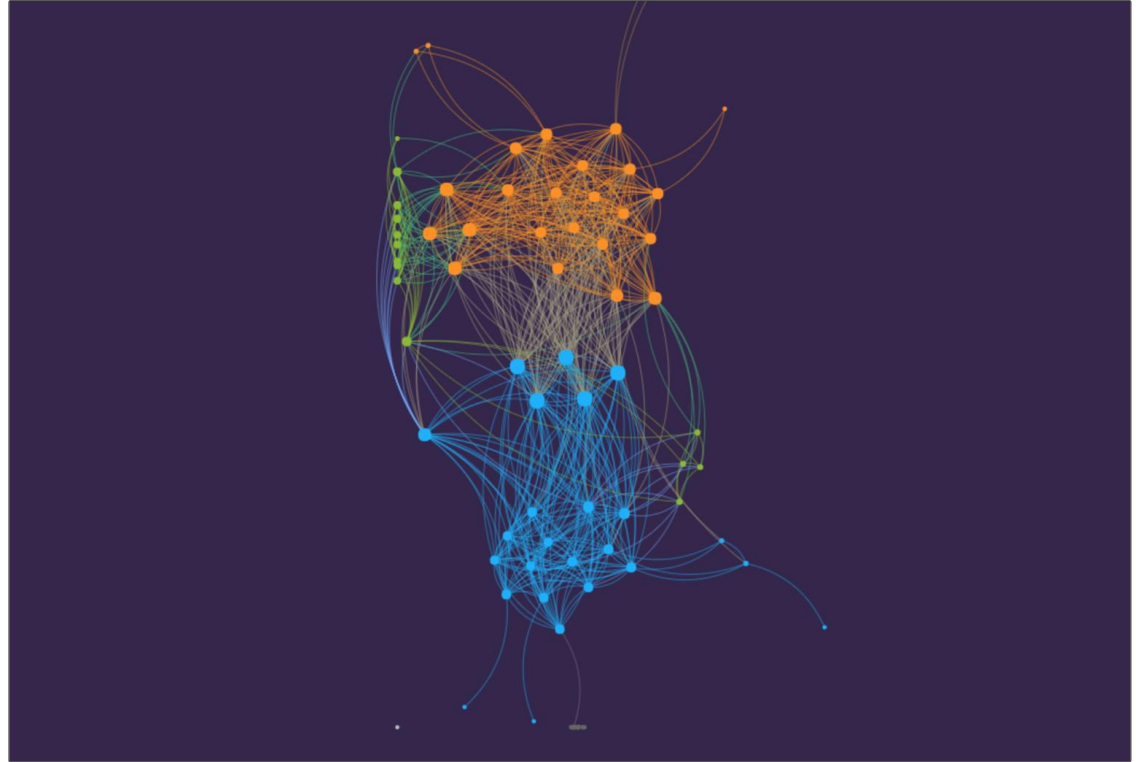| 1	2	3
Access to talent	Bad transport links	Remote area

Tech communities are highly connected

Big data and emerging technology conversations are taking centre stage

Tech meetup groups clustered by topic in the UK 2018

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

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on tour

EDINBURGH	NEWCASTLE	READING	BELFAST	BRISTOL
21st June	27th June	18th July	26th July	12th September

BIRMINGHAM	LEEDS	MANCHESTER	CARDIFF
19th September	27th September	4th October	11th October

Signup at: technation.io/events

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Explore the findings online at:

technation.io/report2018
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