



Internet Association



Internet At Home: The Economic Contributions Of The Internet In UK Constituencies

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Letter From The Chief Economist

Dear internet stakeholders,

IA launched in the UK a little over one year ago. One of our key roles here is to help inform the policy discussion on the UK internet sector through unique and insightful research. It is a responsibility made all the more vital given the lack of basic data and accurate information, and the prevalence of misconceptions.

This report speaks to misconceptions directly by illustrating, for the first time ever, the full geographic scope of the internet sector across the UK. More precisely, we illustrate just how wide of a reach the internet sector has and just how important it is as an economic engine in every community.

In every one of the 650 UK constituencies, there are internet sector businesses that support internet sector jobs and produce internet sector value-added to the national economy. The range is wide – from tens in some communities to tens of thousands in others – and there are some constituencies that meet expectations, such as the high number of jobs in the Cities of Westminster and London. Yet, the numbers also defy expectations – or perhaps misconceptions.

The internet supports every community in the UK. It is far from a closed-off industry in a few isolated areas. It allows homegrown businesses to gain a national and international footing, such as food delivery startups in Wales. It fosters spectacular cultures of innovation, like in the city of Belfast where major international firms continue to locate. It provides a highly productive way for the UK to pursue economic development, like in Scotland's thriving tech scene. And it has bolstered the economic powerhouse that is London, but by allowing it to diversify and thrive in new ways rather than reinforcing old economic traditions.

IA takes its role as the unified voice of the internet economy seriously. We do so because we're acutely aware of just how little data and facts are employed in discussions of the internet sector. Our goal for this report is to help others think differently about the internet and the role it plays in their communities.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Hooton', is written in a cursive style.

Christopher Hooton, Ph.D.
Chief Economist & Head of Research
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Executive Summary

The internet sector contributes jobs and businesses to every community across the UK. IA developed estimates for the size and scope of the internet sector in every UK voting constituency through a combination of its national-level internet sector estimates and proprietary constituency-level weights. The analysis shows a thriving, geographically-diverse internet sector in the UK. Key findings include:

- **The internet sector provides nearly 400,000 jobs across the UK.**
 - The average number of internet sector jobs per constituency is 590.
 - The median number of internet sector jobs across constituencies is 330.
- **The internet sector provides approximately 80,000 businesses in the UK.**
 - The average number of internet sector businesses per constituency is 120.
 - The median number of internet sector businesses across constituencies is 80.
- **The internet sector contributes approximately £45 billion in value-added, the equivalent of 2.3 percent of GDP.**
 - The average value-added generated from the internet sector per constituency is £69 million.
 - The median value-added generated from the internet sector across constituencies is £50 million.



1. Introduction

People often focus on start-ups when talking about tech. This is understandable. It can be fun to think about young, hip places to work where ideas are being tested and applied. Often, that means people think of London. And, indeed, there are 3,000-5,000 tech start-ups in London alone,¹ which speaks to the vibrancy of the UK as a hub for innovation and business.

Internet Association research now shows, however, that the UK internet economy is far more mature and dispersed than looking at start-ups alone can reveal. IA provides in this report first-of-their-kind estimates on the internet sector’s economic footprint for every UK constituency. We provide figures on the local, community impact of the internet in terms of employment, businesses, and value-added for all 650 constituencies. We also profile five communities to examine how the internet positively impacts the everyday lives of people of England, Northern Ireland, Scotland, and Wales.

The UK boasts a vibrant, geographically diverse internet sector. Approximately 80,000 businesses and 400,000 jobs propel the economy, producing £45 billion in value-added contributions to the country’s gross domestic product (GDP).² This report places a microscope over those numbers and allows us to see the detail. The internet sector isn’t concentrated in a few places, but instead contributes to every community. From a few dozen internet jobs in Rhondda, Wales to nearly 23,000 in the Cities of London and Westminster, the internet is a major economic engine for every part of the UK.

2. Key Results

2.1 Employment

The internet sector contributed over 380,000 jobs to the UK economy in 2016. The constituency with the highest number of internet sector jobs is Cities of London and Westminster, England, which has approximately 23,000 or approximately 6 percent of the national internet sector total. The average number of jobs per constituency is 590 and the median number of jobs is 330.

Table 1: Internet Sector Employment – Top 10 Constituencies

Rank	Nation	Region	Constituency	Internet Sector Employment
1	England	London	Cities of London and Westminster	22,730
2	England	London	Holborn and St Pancras	7,580
3	England	London	Bermondsey and Old Southwark	5,400
4	England	London	Islington South and Finsbury	5,260
5	England	North West	Manchester Central	5,030
6	England	London	Poplar and Limehouse	4,430
7	England	Eastern	Welwyn Hatfield	4,310
8	England	South East	Newbury	3,960
9	England	Yorkshire & the Humber	Leeds Central	3,720
10	England	London	Kensington	3,530

Source: IA estimates; rounded to nearest 10

The constituency with the highest concentration of internet sector jobs (as a share of total constituency employment) is Bracknell, England. The internet sector added approximately 5.6 percent of total employment in the community. Interestingly, none of the top 10 areas with the highest share of internet sector jobs are in the London region, which indicates that the internet sector plays an important role in a diverse set of communities across the UK, and not just in the capital.

¹ <http://startup-ecosystem.compass.co/ser2015/>

² <https://uk.internetassociation.org/publications/>

Table 2: Internet Sector Employment As % Of Constituency Total Employment - Top 10 Constituencies

Rank	Nation	Region	Constituency	Internet Sector Employment as % of Constituency Total Employment
1	England	South East	Bracknell	5.6%
2	England	South East	Newbury	5.5%
3	England	South East	Reading West	4.9%
4	England	Eastern	Welwyn Hatfield	4.7%
5	England	South East	Wokingham	4.5%
6	England	South East	Maidenhead	4.4%
7	England	South East	Aldershot	4.3%
8	England	Scotland	Edinburgh West	3.8%
9	England	South East	Slough	3.8%
10	England	South East	Portsmouth North	3.6%

Source: IA estimates

IA also examined a new metric in the current report – Potentially Internet-Related Employment. This metric identifies the total number of jobs in a constituency that reside within internet-relevant industries according to ONS data and IA’s sector definition.³ The identification of potentially-internet related estimates follows the practice set by the U.S. Bureau of Economic Analysis in its data for international trade. According to this metric, the constituency with the highest number of potentially internet-related employment is Cities of London and Westminster, England with approximately 60,000 potentially internet-related jobs. The second most jobs are in Belfast South, Northern Ireland – approximately 20,000 jobs. The average number of potentially internet-related jobs across constituencies is 1,750 and the median is 930.

Table 3: Potentially Internet-Related Employment - Top 10 Constituencies

Rank	Nation	Region	Constituency	Potentially Internet-Related Employment
1	England	London	Cities of London and Westminster	59,930
2	Northern Ireland	Northern Ireland	Belfast South	20,020
3	England	London	Holborn and St Pancras	19,990
4	England	London	Bermondsey and Old Southwark	14,230
5	England	London	Islington South and Finsbury	13,860
6	England	North West	Manchester Central	13,270
7	England	London	Poplar and Limehouse	11,690
8	England	Eastern	Welwyn Hatfield	11,370
9	England	South East	Newbury	10,440
10	England	Yorkshire & the Humber	Leeds Central	9,810

Source: IA estimates; rounded to nearest 10

2.2 Businesses

The internet sector contributed 78,000 UK businesses in 2016. The largest number of these, 1800, reside in Manchester Central, England. The average number of internet sector businesses per constituency is 120 while the median number is 80. The constituency with the highest concentration of internet sector businesses is Pontypridd, Wales where 13.4 percent of local businesses are internet sector businesses. Manchester Central, England and Eastleigh, England have the second and third highest shares of internet sector businesses with 10.9 percent and 10.5 percent, respectively.

³ See “Measuring the UK Internet Sector” report; link in footnote 2.

Table 4: Internet Sector Businesses – Top 10 Constituencies

Rank	Nation	Region	Constituency	Internet Sector Businesses
1	England	North West	Manchester Central	1,800
2	England	London	Cities of London and Westminster	1,650
3	England	London	Holborn and St Pancras	850
4	England	London	Islington South and Finsbury	680
5	England	London	Hackney South and Shoreditch	670
6	England	South East	Eastleigh	650
7	England	London	Poplar and Limehouse	600
8	Wales	Wales	Pontypridd	530
9	England	London	Bermondsey and Old Southwark	530
10	England	South East	Wokingham	490

Source: IA estimates; rounded nearest 10

Table 5: Internet Sector Businesses As % Of Constituency Total Businesses – Top 10 Constituencies

Rank	Nation	Region	Constituency	Internet Sector Share of Constituency Total Businesses
1	Wales	Wales	Pontypridd	13.4%
2	England	North West	Manchester Central	10.9%
3	England	South East	Eastleigh	10.5%
4	England	South East	Wokingham	7.9%
5	England	North West	Garston and Halewood	7.4%
6	England	South East	Milton Keynes South	7.3%
7	England	South East	Slough	7.0%
8	England	London	Orpington	6.6%
9	England	London	Poplar and Limehouse	6.5%
10	England	South East	Reading East	6.5%

2.3 Value-added

Nearly £45 billion, or 2.3 percent of the UK's GDP, came from the internet sector in 2016. The largest contributor was the Cities of London and Westminster, England with over £900 million in value-added contributions. That is more than twice the size of the constituency with the second largest value-added contribution – Manchester Central (England) with £420 million. The average value-added from the internet sector per constituency is £69 million and the median is £50 million.

Table 6: Internet Sector Value-added – Top 10 Constituencies

Rank	Nation	Region	Constituency	Internet Sector Value-added 2017 (millions)
1	England	London	Cities of London and Westminster	£908.9
2	England	North West	Manchester Central	£420.0
3	England	London	Holborn and St Pancras	£402.0
4	England	London	Islington South and Finsbury	£317.6
5	England	London	Bermondsey and Old Southwark	£300.2
6	England	London	Poplar and Limehouse	£284.8
7	England	London	Hackney South and Shoreditch	£255.8
8	Northern Ireland	Northern Ireland	Belfast South	£220.7
9	England	London	Brentford and Isleworth	£214.3
10	England	London	Kensington	£206.3

3. Profiles

The following provides a brief look at some exceptional internet sector communities in the UK. These constituencies offer new insights into where and how the internet sector thrives. The profiles demonstrate how the internet sector helps communities of all types across all of the UK.

3.1 Edinburgh West, Scotland

Edinburgh overall boasts a vibrant tech community exemplified by innovative companies like Care Sourcer, a platform for searching and comparing UK care providers which recently announced 70 new jobs⁴, to Wallet Services, a leading data company at the cutting edge of blockchain.⁵ This constituency boasts the 8th highest concentration of internet sector employment in the UK. About 3.8 percent of jobs in the community come from the internet sector. About 4.7 percent of all businesses are internet sector businesses. These equate to about 2,150 jobs and 170 businesses and are part of the broader Scottish ecosystem of 58,000 tech jobs overall.⁶

3.2 Pontypridd, Wales

The highest concentration of internet businesses across the UK can be found in Pontypridd, Wales. Approximately 530 or 13.4 percent of the local economy's businesses are internet sector businesses, which support over 700 jobs. A strong local ecosystem supports the local internet economy and has helped turned the region into one of the fastest growing digital clusters in the UK.⁷ For example, the Centre of Excellence in Mobile and Emerging Technologies at the University of South Wales supports Welsh small businesses with access to funded research and development⁸ and the local 5 to 9 Club offers workshops to residents on entrepreneurship.⁹ These types of programs and the broader local ecosystem have led to successful internet startups like Bring-It, a food delivery app based in Pontypridd.¹⁰

⁴ <https://www.bbc.co.uk/news/uk-scotland-scotland-business-49497210>

⁵ <https://www.wallet.services/>

⁶ <https://technation.io/about-us/national-network/scotland/>

⁷ <https://www.theguardian.com/small-business-network/2015/nov/27/tech-startups-wales-digital-clusters-cardiff>

⁸ <https://www.cemet.wales/>

⁹ <https://welshice.org/blog/pontypridd-5-to-9-club-launches>

¹⁰ <https://www.theguardian.com/small-business-network/2015/nov/27/tech-startups-wales-digital-clusters-cardiff>



3.3 Manchester Central, England

The Manchester Central conference venue recently won the Event Technology Awards prize for the most innovative and tech-friendly venue in the UK.¹¹ The award is representative of Manchester’s thriving internet sector. Groups like Tech Manchester¹² and Manchester Tech Trust¹³ help lay the foundation to allow the sector to thrive, and local frontier companies like WEJO, a connected vehicle start-up with a strong presence in the region to succeed.¹⁴ Together, the constituency of Manchester Central boasts the most internet sector businesses of any community in the UK with 1,800. These businesses provide over 5,000 jobs.

3.4 Belfast South, Northern Ireland

In June 2019, the Belfast metro area had 16,000 new postings for digital technology jobs. This isn’t surprising given the city already has 60,000 digital tech jobs and a reputation for a skilled workforce and innovative business scene.¹⁵ The constituency of Belfast South alone has approximately 20,000 potentially internet-related jobs, which is the second highest in terms of volume in the UK, behind only the Cities of London and Westminster. There are no signs of slowing down either – firms continue to start up or move in, such as the Silicon Valley-based Dynamic Signal, which recently opened up shop there.¹⁶

3.5 Cities of London & Westminster, England

The constituency with the largest internet sector economic footprint is the Cities of London and Westminster. Given its central role in the capital (both geographically and economically) it is unsurprising that major international companies like Deliveroo, PayPal, Facebook, and others have major presences there. Overall, the constituency gains nearly £1 billion in value-added, 23,000 jobs, and 60,000 potentially internet-related jobs from the internet sector (the most in terms of volume for each category).

4. Discussion & Conclusion

One of the biggest misconceptions about the internet sector is that it only exists in well-known tech hubs, places such as Cambridge and London in the UK or Silicon Valley in the United States. The reality is that the internet sector is far more dispersed. Across the UK, the internet sector benefits every region and constituency. The largest internet economy footprints are in London and the South East of England, but they are far from the only locations with a thriving sector. Scotland enjoys a disproportionate amount of value-added from the internet compared to its share of businesses and employment in the sector, indicating it is highly productive. Wales has an outsized internet employment base, indicating it has been effective at bringing individuals into the sector. Northern Ireland boasts a digital tech hub around Belfast with a stellar international reputation. Appendix A provides these regional breakdowns and Appendix B provides estimates for all 650 voting constituencies across England, Northern Ireland, Scotland, and Wales.

What you will see from the estimates provided here is that every community in the UK benefits from internet sector jobs, businesses, and commerce. And while every place may not have newspaper write-ups on the hot, new start-up or digital hub in the area, every community can certainly appreciate the passion, drive, innovation, and opportunities created by the internet.

¹¹ <https://www.manchestercentral.co.uk/manchester-central-crowned-most-innovative-and-tech-friendly-venue>

¹² <https://techmanchester.co.uk/>

¹³ <http://www.manchestertechtrust.com/>

¹⁴ <https://www.businesscloud.co.uk/news/flying-tech-firm-to-create-100-jobs-at-new-manchester-office>

¹⁵ <https://www.belfastlive.co.uk/news/belfast-news/belfast-tech-workers-raking-industry-16414572>

¹⁶ <https://www.insidermedia.com/news/ireland/software-company-to-open-new-belfast-office>



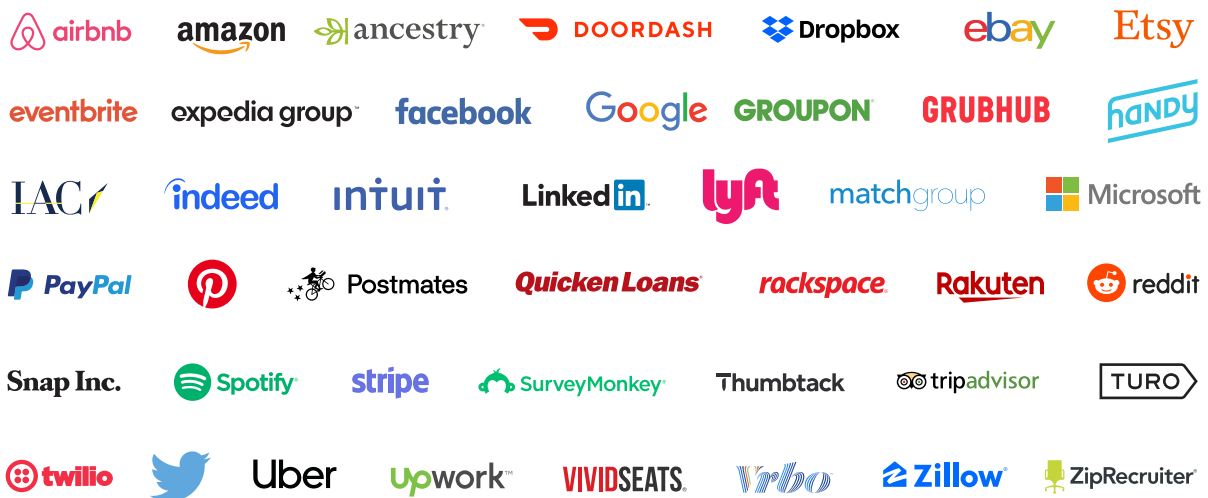
Methodology Note

IA developed the estimates in this report through a combination of its national-level internet sector estimates and proprietary constituency-level weights. The national estimates are available in IA's report, "Measuring the UK Internet Sector" on IA's website.¹⁷ IA calculates its constituency weights using the concentration of internet-related industries within each constituency. IA calculates unique weights for employment, businesses, and value-added. For employment, IA weights according to the percent of national employment from internet-related industries within each constituency. IA uses the same approach for businesses. For value-added, IA develops a weight based on the constituency's share of the region total value-added from internet-related industries and on the concentration of internet-related employment and internet-related businesses in the constituency. IA rounds all employment and business figures to the nearest 10. IA rounds all value-added figures to the nearest hundred-thousand. IA emphasizes that all figures are estimates only, made in a good-faith effort, and should not be interpreted as precise counts. Appendix B provides the full set of estimates for all 650 UK voting constituencies.

To find data on all 650 UK voting constituencies, [click here](#).

Questions? Contact: economics@internetassociation.org

¹⁷ <https://uk.internetassociation.org/publications/>



We are the unified voice of the internet economy

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Internet Association is the only trade association that exclusively represents leading global internet companies on matters of public policy. Our mission is to foster innovation, promote economic growth, and empower people through the free and open internet. We believe the internet creates unprecedented benefits for society, and as the voice of the world's leading internet companies, Internet Association works to ensure legislators, consumers, and other stakeholders understand these benefits.