



Department for  
Business, Energy  
& Industrial Strategy

# BUSINESS INCUBATORS AND ACCELERATORS: THE NATIONAL PICTURE

BEIS research paper number 7

Jonathan Bone, Olivia Allen and Christopher Haley



April 2017

Prepared for the Department for Business, Energy and Industrial Strategy by:



The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Business, Energy and Industrial Strategy.

## Acknowledgements

This report was written by Jonathan Bone, Olivia Allen and Christopher Haley of Nesta, with funding from BEIS. It was made possible through the support of colleagues at Nesta. In particular, we would like to thank Siddharth Bannerjee, Simona Bielli, Yann Finger and Rachel Ravenswood for their assistance and comments.

The report could not have been written without UKSPA and Synoptica's assistance with data collection. In particular, we would like to recognise the support of Jim Duvall from UKSPA, and Charles Naud and Stephen Mooney from Synoptica.

We would like to thank BEIS staff for their input to this report, particularly Judith Peterka, Jo Symons, Angus Heberton and Khalid Khan. We are also grateful to the feedback received from various accelerator and incubator managers during BEIS workshops.

We would also like to thank Jonas Van Hove (ETH Zurich), Maximilian Yoshioka (Centre for Entrepreneurs), Matt Smith (Centre for Entrepreneurs) and Nicky Dee (University of Cambridge) for their valuable feedback and comments on an earlier version of this report.

# Contents

Acknowledgements	2
Executive summary	7
The incubator and accelerator landscape in the UK	7
Trends	8
Avenues for further research	9
1. Introduction	10
Aims of this report	10
2. Defining Incubators and Accelerators	11
Startup	11
Business Incubation	11
Incubators	12
Accelerators	13
Other Business Support Programmes	14
3. The UK's Incubator and Accelerator Landscape	17
Methodology for data collection	17
Overview of findings about incubators	18
Overview of findings about accelerators	21
Sector distribution	24
How are incubators and accelerators distributed across the UK?	29
What catchment areas do incubators and accelerators have?	34
Public funding by region and sector	36
Overview of findings on pre-accelerators, virtual incubators and virtual accelerators	39
4. Trends	41
Growth in number of programmes and facilities	41
Accelerators are expanding to locations outside of London	42
Rise of the corporate accelerator	43
Diversification of business incubation models	45

5. Limitations and avenues for further research _____	47
6. Discussion and conclusions _____	49
7. References _____	51
8. Appendix _____	54
Supplementary Tables and Figures _____	54
UK Accelerator / Incubator Directory User Guide _____	67

## Tables and Figures

### Tables

Table 1: Comparison of business incubation types and their common features	16
Table 2. Distribution of incubators by NUTS 1 regions and countries	31
Table 3. Distribution of accelerators by NUTS 1 regions and countries	32
Table A1. Distribution of incubators by Local Enterprise Partnerships	55
Table A2. Distribution of accelerators by Local Enterprise Partnerships	56
Table A3. Distribution of incubators by NUTS 2 regions	58
Table A4. Distribution of accelerators by NUTS 2 regions	58
Table A5. Pre-existing literature and databases	59
Table A6. Standard Industrial Classification (SIC) Divisions, corresponding sectors and GVA contribution to UK economy	63

### Figures

Figure 1: Overlapping features between incubators and accelerators	14
Figure 2. Percentage of incubators offering different forms of business support	19
Figure 3. Percentage of incubators receiving funding from different sources	20
Figure 4. Percentage of incubators accepting each stage of business	20
Figure 5. Percentage of accelerators offering different forms of business support	22
Figure 6. Percentage of accelerators receiving funding from different sources	23
Figure 7. Percentage of accelerators accepting each stage of business	24
Figure 8. Percentage of total incubators with specific sectoral focus	25
Figure 9. Percentage of accelerators with specific sectoral focus	26
Figure 10. Number of incubators per 1000 new businesses	28
Figure 11. Number of accelerators per 1000 new businesses	28
Figure 12. Map of UK incubators and accelerators	29
Figure 13. Map of incubator and accelerator density (per 1000 new businesses) in the UK	30

Figure 14. Percentage of incubators reporting regional, national, international and university wide catchment areas _____	35
Figure 15. Percentage of accelerators reporting regional, national, international and university wide catchment areas _____	35
Figure 16. Percentage of incubators focussing on each sector that rely solely on university and public funding _____	37
Figure 17. Percentage of accelerators focussing on each sector that rely solely on university and public funding _____	37
Figure 18. Percentage of incubators in each region and country (NUTS 1) which rely solely on university and public funding _____	38
Figure 19. Percentage of accelerators in each region and country (NUTS 1) which rely solely on university and public funding _____	38
Figure 20. Growth of incubators and accelerators 1987 - 2016 _____	42
Figure 21. Percentage of accelerators that launched in 2016, 2015, 2014, and pre-2014, which are based outside London _____	43
Figure 22. Percentage of accelerators that launched in 2016, 2015, 2014, and pre-2014, which are corporately funded _____	45
Figure A1. Percentage of incubators and accelerators focused on each Standard Industrial Classification (SIC) division, in order of Gross Value Added (GVA) contribution of SIC divisions _____	54

# Executive summary

This report describes the landscape of business incubators and accelerators in the UK, exploring the scale and distribution, both geographically and sectorally.

Both accelerators and incubators aim to support young firms through the early and fragile stages of growth - in theory, helping them avoid the mistakes of others, saving time and money and increasing survival rates. Because of this shared goal, these two types of organisation are sometimes conflated. However, startup accelerators are a more recent phenomenon than business incubators and do have some significant differences around their business model, source of funding, and services delivered.

## The incubator and accelerator landscape in the UK

This report presents insights from the analysis of a new dataset of business incubators and accelerators in the United Kingdom. Information on these programmes was collected between November 2016 and March 2017, using a combination of methods including: the aggregation of existing databases, an open call to incubators and accelerators, the use of an artificial intelligence engine and manual web searches<sup>1</sup>.

Key findings include:

Our data shows that there are currently 205 incubators, 163 accelerators, 11 pre-accelerators, 7 virtual accelerators and 4 virtual incubators active in the UK. A number of related organisations were identified, such as coworking spaces, active venture capital funds and makerspaces; several of these referred to themselves as accelerators or incubators, but did not meet our definitions and therefore were not included in the report/dataset.

While all incubators provide businesses with office / work space, accelerator programmes place more emphasis on direct funding, with the majority offering some form of financial support to startups.

In terms of sectors, the majority of accelerators and incubators have either a broad focus on digital technology or no sectoral preference. Where a sectoral preference exists, incubators are much more likely to focus on businesses active in science-based areas, such as health and life sciences, than accelerators.

More than half of accelerators are currently based in London, while incubators are spread relatively evenly throughout the UK. Scotland, Wales and Northern Ireland have a greater

---

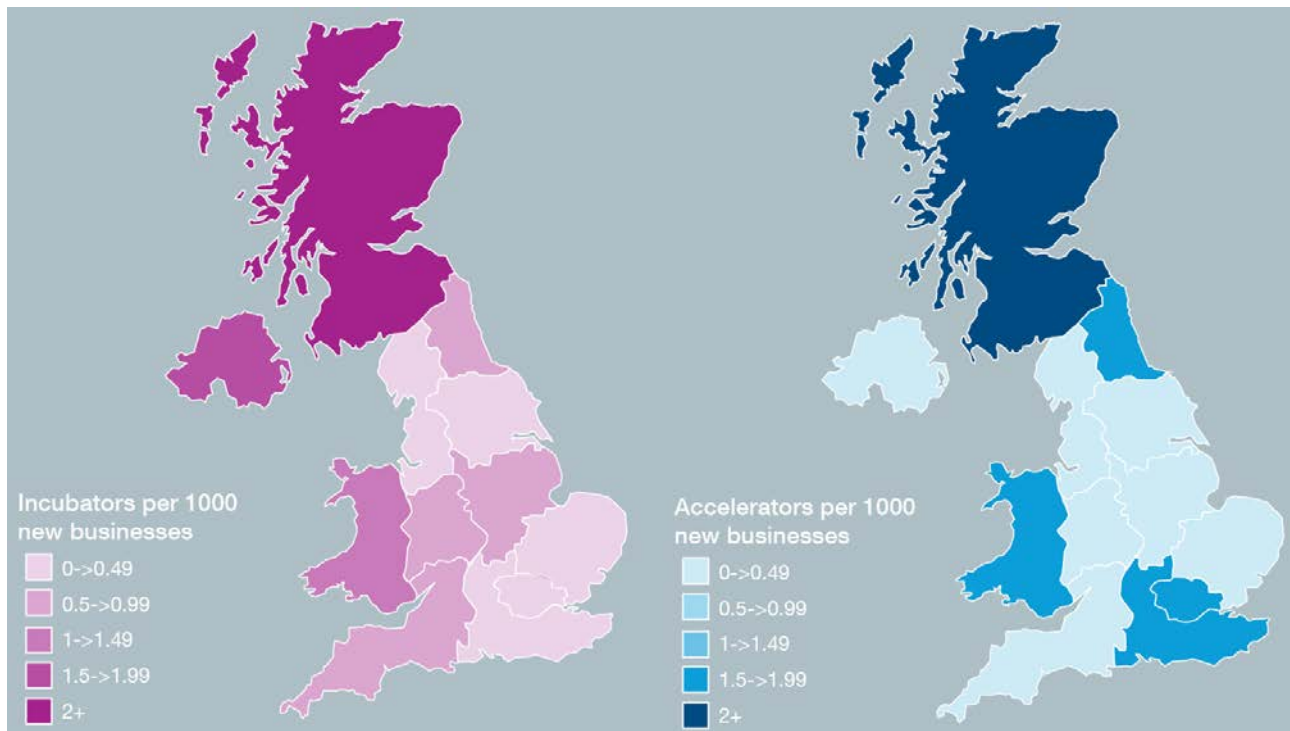
<sup>1</sup> Please note: This is to our knowledge the most complete data base of incubators and accelerators (within the definition of this report) in the UK, but there is a possibility that some incubators and accelerators may not have been identified.

concentration of both incubators and accelerators, relative to the number of new businesses, than England.

Incubators tend to serve local businesses: on average, businesses travelled a shorter distance to participate in incubators than accelerators. There are a few 'virtual' incubators and accelerators which operate online and hence require no travel.

In terms of source of funding accelerators tend to rely on corporate sources for funding rather than public sector or universities. Incubators report opposite trend. This study finds that all incubators in the North East, along with more than 35% in Wales, Scotland and the West Midlands are entirely public / university funded. Incubators in Agritech, Space & Satellite, and Transport sectors also seem to attract significant public funding, with more than half of these entirely supported by public and/or university sources, whilst accelerators and incubators supporting startups in Edtech and Fintech currently operate with little public or university funding.

### Map of incubator and accelerator density (per 1000 new businesses) in the UK



Business birth rates for different regions were obtained for 2015 from the Office of National Statistics and are based on new registrations for VAT and PAYE across all business sectors.

## Trends

While the incubator and accelerator dataset only provides a snapshot of programmes and facilities which were active at the point of data collection, and so does not include information on programmes that have closed or changed over time, it can give us an indication of how the incubator and accelerator landscape has developed over time.



Analysing this data highlights several trends:

The vast majority of accelerator programmes in our data base have been created since 2011. Just over half (54%) of incubator programmes have also been created since 2011.

While most accelerators are concentrated in London, there is a trend towards other cities such as Birmingham, Bristol, Cambridge and Manchester. A similar trend was not observed for incubators as they have always been more evenly distributed throughout the UK.

Incubators are predominantly funded by the fees or rent they charge residents. In contrast, accelerators are most often funded by corporates. Furthermore, this trend for corporate funded accelerators appears to be growing very rapidly.

We have also observed a diversification of the traditional incubator and accelerator programmes. Among the variants are 'pre-accelerators', which provide very early stage support to entrepreneurs who aim to join an accelerator programme in the future. We also see programmes moving online, with virtual incubators and accelerators which do not offer physical space but aim to provide other services, such as training and mentoring, remotely. In addition, we see coworking spaces and venture capital funds which are beginning to provide services more traditionally associated with incubators and accelerators.

## Avenues for further research

This study of UK accelerators and incubators is, we believe, the most comprehensive list to date. However, several important questions remain which were either outside the scope of the original study or which could not be answered due to lack of data. We highlight several avenues for further research including: exploring the availability of other forms of business support such as coworking spaces, VC funds, and business development courses; investigating how far entrepreneurs are able and willing to travel to access business support; studying how important a role startups play in different sectors; and analysing the cost-effectiveness of different business incubation models and interventions.

We hope that this study will stimulate further research in these areas. The full dataset can be downloaded from the BEIS website and we encourage others to develop the data further.

# 1. Introduction

## Aims of this report

Accelerators and incubators support young businesses through the early and fragile stages of growth. This support can – in theory – help them avoid the mistakes of others, save time and money and increase survival rates. This, in turn, has consequences for job creation, regional development, innovation and economic growth.

The research aims to describe the existing landscape in the UK as well as to explore the scale and distribution, both geographically and across sectors, of the activity that is currently underway. This report was prepared with an accompanying database which is publically available and can be downloaded from [GOV.UK](https://www.gov.uk), and is intended to provide the most complete coverage to date of accelerators and incubators in the UK. Whilst previous surveys and databases exist, these are often incomplete. Readers should be aware, however, that business accelerators have evolved dramatically over the past decade and the field continues to change rapidly; at the time of writing, new UK programmes are launching almost weekly. This means that the shelf-life of any study of this area is necessarily limited.

It is hoped that the publication of this new dataset and report will be of interest to those concerned with business support in the UK - including policymakers at national and local levels, accelerator and incubator managers, coworking spaces, local enterprise partnerships, cluster managers, venture capitalists, angel investors, universities and innovative corporates - and may stimulate further research in this area. We hope that the directory will also be useful for entrepreneurs by providing them with information about programmes and facilities to which they can apply.

The study does not aim to evaluate the effectiveness of the accelerators or incubators.<sup>2</sup> To do so would require not only a comparison of different success metrics for programmes, but also adequate control groups of non-supported firms, in order to answer the question of whether competitive programmes actually create successful firms or merely select them. Suggestions for further research and their limitations are discussed at the end of the report.

The study was commissioned by BEIS and prepared by Nesta, the UK's innovation foundation, with support from the UK Science Parks Association (UKSPA) and Synoptica, an artificial intelligence data provider. Errors and omissions are the responsibility of the authors alone.

---

<sup>2</sup> Current evidence for the effectiveness of accelerators is positive but limited. Among the more recent studies, (Gonzalez-Urbe and Leatherbee 2014), (Hallen, Bingham, and Cohen 2014), (Smith and Hannigan 2015), and (Fehder and Hochberg 2014) find that some accelerators have a positive effect on startup success. However, (Yu 2016) finds a negative effect of accelerators on participant startups success.

## 2. Defining Incubators and Accelerators

Several of the key concepts used in this report do not have one single definition and their use has often changed over time. Thus, in this section we clarify how we use the terms: startup, business incubation, incubator and accelerator.

### Startup

The term 'startup' is typically applied to young, innovative firms with growth ambition, often operating under conditions of significant uncertainty such as an unproven technology or a new business model. In this usage, startups are usually a special subset of SMEs, but the terms are not synonymous. This is an important distinction to make, since policies and initiatives aimed at promoting innovative startups and potential high-growth firms are likely to be somewhat different from policies designed to assist established small firms (Gale and Brown 2013).

Development stages of startups may also need clarification, since the commonly-used terms are imprecise. In what follows, we consider the 'pre-startup' phase as the period in which entrepreneurs may have little more than an unproven idea, and so the focus of support is predominantly on the entrepreneur or founder with emphasis on testing the idea and identifying the product-market fit. In the 'startup' phase, companies are in the process of being set up. 'Early-stage' ventures may have initial market traction but require further funding for commercial manufacturing and will likely not yet be generating profits. 'Later-stage' ventures will usually demonstrate viability, growth and potentially profitability (Dee et al., 2015).

Different support programmes cater for different stages of startup development. Some programmes, for instance, welcome entrepreneurs at the pre-startup stage. Other programmes target later-stage companies where the firm may already have a multi-million pound valuation and proven product or service. Most cover a range in between. For the purposes of this report, other than where the development stage is specifically mentioned, we use the term 'startup' loosely, covering firms at various stages of development.

### Business Incubation

Business incubation is an established concept, although interpretations vary. In this report, we follow others (Dee et al. 2015) in considering incubation as an umbrella term for a range of support activities, provided by a variety of organisations, not just as the services provided by a self-identified 'incubator'.

The former UK Business Incubation association provides a useful definition: 'Incubation is a unique and highly flexible combination of business development processes, infrastructure and people, designed to nurture and grow new and small businesses by supporting them through the early stages of development and change' (UKBI, 2013). Alternatively, one may use that provided by Miller and Stacey (2014): "Incubation' is a

collection of techniques that can be used to prove an idea, develop a team and de-risk ventures for later-stage investors”.

We will not examine business incubation per se, but concentrate on two specific types of organisation which provide this: incubators and accelerators.

## Incubators

Incubators are typically physical spaces, available on relatively flexible terms, which provide additional incubation services (Dee et al., 2015). These services generally include provision of training for entrepreneurs, access to networks and specialist equipment. Incubators are typically dependent on charging rent or membership fees to residents, often on a monthly basis (Dee et al., 2015; Aerts et al., 2007). By charging rent, rather than taking equity in the businesses they support, incubators are able to support businesses that are unlikely to scale rapidly. In many cases, incubators are aligned with a university, supporting spin-outs along with other local businesses.

One relatively well-defined subset is bioincubators, which typically contain ‘wet labs’ - facilities for handling chemical or biological materials.<sup>3</sup>

For the purposes of this study, we consider an incubator as being defined by the following characteristics:

- Open-ended duration (exit usually based on the stage of the company, rather than a specific time frame)
- Typically rent/fee-based
- Focus on physical space over services
- Admissions on ad-hoc basis (not cohort-based)
- Provision of services including mentorship, entrepreneurial training
- Often provide technical facilities such as laboratory equipment
- Selective admission (but typically less so than accelerators)

An emerging variant model is the virtual incubator, which focuses solely on providing services, such as mentoring and access to investors, without physical space or infrastructure (Nowak and Grantham, 2000). Some physical incubators may offer virtual tenancy as well as physical tenancy.

The number of incubators has increased significantly in the past half-century. For a review of the evidence concerning the value of incubation, see Dee et al (2011).

---

<sup>3</sup> Probably the most well-known UK Bioincubator is the Babraham Bioincubator in Cambridge

## Accelerators

Accelerators are a more recent phenomenon than incubators, but are now sufficiently well established to be familiar to many.

Their history has been traced by some (Miller and Bound, 2011) to the US programme Y Combinator which was established in 2005 for digital startups. Since that time, numerous similar programmes have appeared, expanding into new geographies and sectors.

Whilst early programmes were funded primarily by venture capitalists seeking to develop deal-flow, newer programmes have been established by a wider variety of organisations, including large corporates and the public sector.<sup>4</sup> These new players often have different missions, which in turn may lead to differences in selection criteria, funding model and success metrics (Van Hove, Clarysse, and Wright, 2015). However, the offer of seed funding is still a common characteristic of most - but not all - accelerator programmes.

In contrast with incubators, accelerators typically provide services through a highly selective, cohort-based programme of limited duration (usually 3-12 months). Services often include assistance in developing the business plan, investor pitch deck, prototypes, and initial market testing (see Figure 1).

Whilst incubators typically charge rent or membership fees, accelerators more often base their business model on equity from the startups. This means that they are more growth-driven, typically aiming to produce companies that will scale rapidly or fail fast, thus minimising wasted resources. Exceptions to this business model do exist, however - most commonly with corporate accelerators, where some firms may choose to sponsor or subsidise such a programme for broader strategic reasons including internal innovation, cultural change, marketing, corporate social responsibility (CSR) or public relations.

Increasingly, accelerators are providing support designed for more established and high growth companies looking to scale up their business. Support for the pre-startup stage is offered in the form of pre-accelerator programmes, directed at entrepreneurs or startups with the aim of joining an accelerator programme in the future.

For the purposes of this study, we adapt the work of Miller & Bound (2011) and Cohen & Hochberg (2014), and consider an accelerator as defined by the following characteristics:

- Fixed duration programme (usually between three and twelve months)
- Typically growth-based (payment via equity rather than fees)
- Often provide seed funding
- Focus on services over physical space

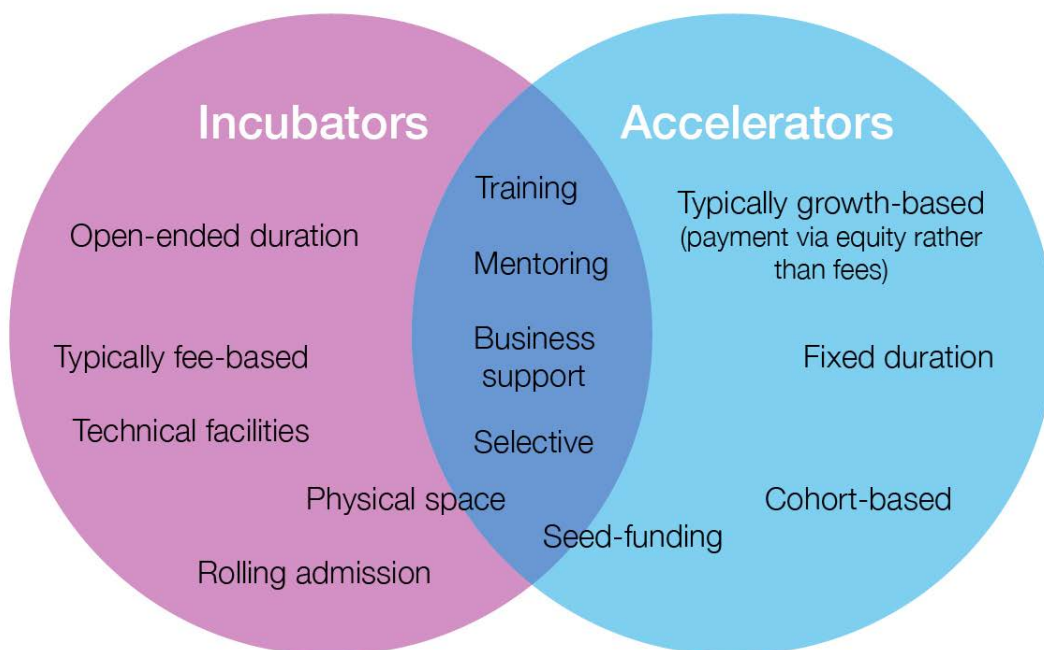
---

<sup>4</sup> e.g. GCHQ Cybersecurity Accelerator

- Admission in cohorts
- Provision of startup services (e.g. mentorship, entrepreneurial training)
- Highly selective

As with incubators, there are also 'virtual' variants - that is, programmes which do not offer physical space but aim to provide other services remotely.

**Figure 1: Overlapping features between incubators and accelerators.**



Source: Adapted from Dempwolf et al. (2014)

## Other Business Support Programmes

Various other forms of startup support exist, in addition to the above. Closely related support types include coworking spaces, active seed / venture capital (VC) funds, makerspaces, business development courses and business plan competitions.<sup>5</sup>

Coworking spaces are physical workspaces, usually providing basic office services and available on highly flexible terms, and sometimes reserved for individuals and young, growing companies. These services come at a cost, often a membership or rolling

<sup>5</sup> An non-exhaustive list of these facilities is included in the online dataset

contract, though there is usually no limit to the time a company can remain resident and access services. Laboratory space or additional incubation support has traditionally not been available in coworking spaces. However, some have begun to offer mentorship support and related services; in this report, such organisations will be referred to as 'coworking space +' to differentiate them from traditional workspace-only coworking spaces.<sup>6</sup>

Active seed / VC funds, in our usage, are funds which offer additional support besides pure investment capital. Such support may include office space or mentorship.

Makerspaces are facilities for digital design and fabrication. They are predominantly membership organisations that provide both formal courses and informal help to users (Stokes, Stewart, and Sleigh, 2015). Increasingly, makerspaces offer these same services to startups and SMEs, though they are typically non-selective (no specific entrance requirements; usually intended to be accessible by anyone) and do not offer mentorship or business development support.<sup>7</sup>

Business development courses are often run by higher education institutions. These take a wide variety of forms, from degree programmes designed specifically for students to develop an idea and create a business, to evening classes for alumni or local businesses. Support offered may include mentoring, seminars, training, networking opportunities, funding advice, access to expertise (often from within the university) and in some cases, low-cost office space.

Business plan competitions give entrepreneurs the chance to pitch their ideas against others in front of a panel of experts. While awards typically come in the form of grants of between £1,000 and £50,000, competitions also give startups the opportunity to attract serious investors and business partners as well as to receive valuable feedback on their ideas.<sup>8</sup>

The table below helps compare and contrast these different support types. For further details of how these other programmes relate to accelerators and incubators, see Dee et al. (2015).

---

<sup>6</sup> An example of a coworking space plus is Studio : 505 in Sheffield which offers seminars, workshops and networking connections alongside office space

<sup>7</sup> Makerspaces were not specifically included in our database. For a directory of UK makerspaces, see [www.nesta.org.uk/uk-makerspaces](http://www.nesta.org.uk/uk-makerspaces)

<sup>8</sup> Examples of business plan competitions include: The Santander Universities Entrepreneurship Awards, The Mayor's Entrepreneur Competition and The Shell LiveWIRE Awards.

**Table 1: Comparison of business incubation types and their common features.**

<b>Features</b> <b>Incubation type</b>	Investment	Office/W ork Space	Services - inc. mentoring	Fixed duration	Cohort- based	Selective
Incubator	N	Y	Y	N	N	Y
Accelerator	Y	Y	Y	Y	Y	Y‡
Pre-accelerator	N	N	Y	Y†	Y	Y
Virtual Accelerator	Y/N	N	Y§	Y	Y	Y
Virtual Incubator	N	N	Y	N	N	Y/N
Active seed / VC	Y	Y/N*	Y/N*	N	N	Y
Coworking space +	N	Y	Y	N	N	N
Makerspace	N	Y	Y	N	N	N

A common feature of a particular incubation type is indicated by a green cell and Y, a feature which is usually absent in an incubation type is indicated by a red cell and N, a feature which is sometimes present, but not common, to an incubation type is indicated by an orange cell and Y/N.

\*Venture capital plus must have either space or mentoring

† Less than one month

‡ Highly selective

§ Delivered online



## 3. The UK's Incubator and Accelerator Landscape

### Methodology for data collection

The data used in this study was collected using a combination of methods including: the aggregation of existing databases, an open call to incubators and accelerators, the use of an artificial intelligence engine and manual web searches.

Data collection was undertaken by Nesta in collaboration with the UK Science Park Association (UKSPA) and Synoptica, an artificial intelligence software provider that specialises in sourcing and aggregating information from the web and third party databases.

Data were collected between November 2016 and March 2017.<sup>9</sup> Sources included past Nesta publications, existing aggregators (such as F6S, GUST and Seed-DB), attendee lists from past corporate acceleration events and news sources reporting on the launch of new programmes. HESA's Higher Education Business-Community Interaction survey provided a list of higher education institutions which potentially operated accelerator or incubation programmes.

Primary data was also gathered via a survey distributed through startup networks, the European Accelerator Assembly, social media and direct communication between the project partners and stakeholders, such as the UKSPA membership (which includes several members of the now-defunct UKBI; see Appendix for survey questions). This open data collection assisted both in identifying additional incubators and accelerators and in providing more complete data, since some information - such as numbers of companies incubated - was difficult to obtain via public sources.

Further data was added by Synoptica, which used data from existing databases as a 'learning set' for its AI engine before using this to source additional data from the web. This process was different to simply 'crawling' or 'scraping' the web because it used relationships and natural language processing to create correlations between organisations and their attributes.

Where possible, candidate organisations identified via the techniques described above were then contacted directly via email or telephone to verify that the data obtained was accurate. For further information on the data collection process including a transcript of the survey and details on the cleaning and standardisation of data please see the Appendix.

---

<sup>9</sup> Cut-off date for data collection was 13<sup>th</sup> March 2017.

## Overview of findings about incubators

We identified that there are currently 205 active incubators in the UK,<sup>10 11</sup> supporting around 3,450 new businesses a year (or 6,900 businesses at any one time).<sup>12</sup> Besides providing office space, just over half of incubators reported offering mentoring or networking connections / access to investors. In addition, more than one in four offer seminars / workshops, laboratory space or funding advice. Although incubators also reported offering other forms of support such as training, direct funding, access to experts, demo days and legal / accountancy support (including intellectual property advice), this was relatively uncommon (Figure 2).

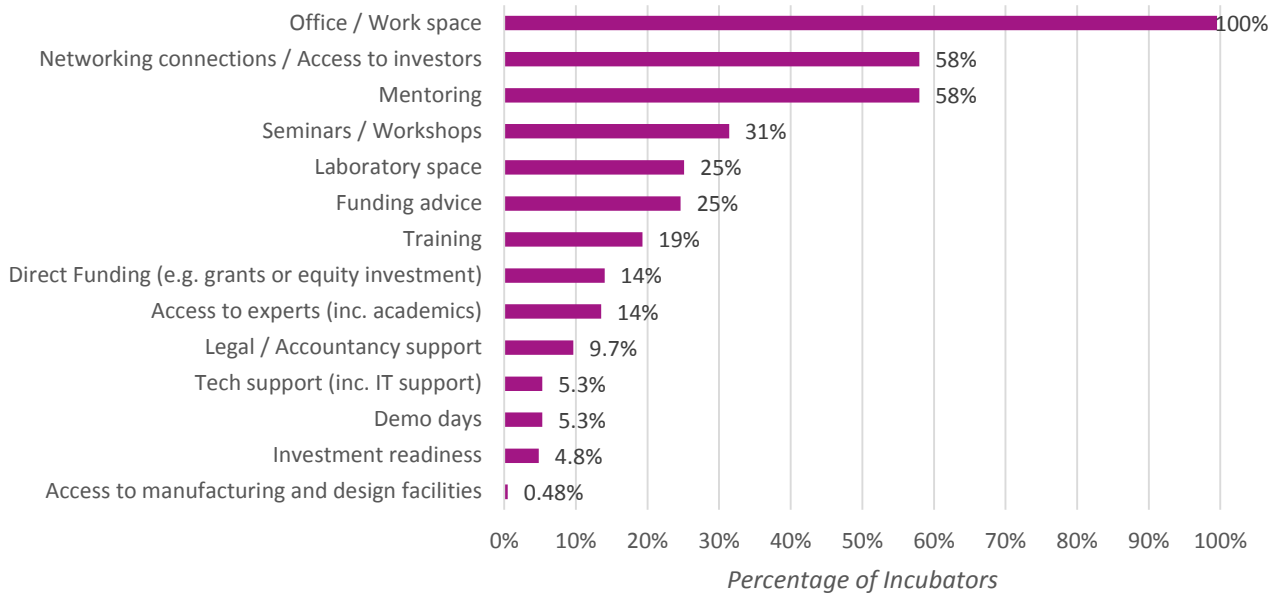
Of the 14% of incubators that provided direct funding to entrepreneurs, the average amount given was just under £25,000. It is important to note however, that this funding was provided via a combination of grants, loans (some with 0% interest) or in exchange for equity, so the amounts given vary substantially. Those incubators that take equity in return for investment (relatively uncommon: only 8% of all incubators) reported taking an average 16% share.

---

<sup>10</sup> This is considerably more than have been identified by pre-existing databases (see Appendix; Table A1).

<sup>11</sup> This number includes three University Enterprise Zone's (UEZ): The Ingenuity Lab in Nottingham, Future Space in Bristol and Digital Health Enterprise Zone in Bradford. These UEZs are a wider concept than that of an incubator, representing specific geographical areas where universities and business work together to increase local growth and innovation. Each UEZ will be supported by a partnership between a university, Local Enterprise Partnerships (LEPs) and others. They have been included because parts of the UEZs share the characteristics we associate with incubators.

<sup>12</sup> Total number of new businesses supported per year was estimated by first multiplying the average number of businesses supported at any one time by a single incubator (33.66) by the total number of number of incubators identified (205). This gave us a total of 6,900 businesses being supported at any one time; however, the average time a single business stays in an incubator is around 2 years, therefore the number of new businesses supported each year is half this - i.e. 3450. Our estimate of the number of businesses supported at any one time (6,900) is noticeably smaller than the 9,250 estimated by UKBI in (2013) (which was based on an estimated 250 incubators supporting on average 37 businesses each per year). The difference between our estimates is largely due to the narrower definition of an incubator applied in this study (a similar average number supported per incubator was calculated in both studies).

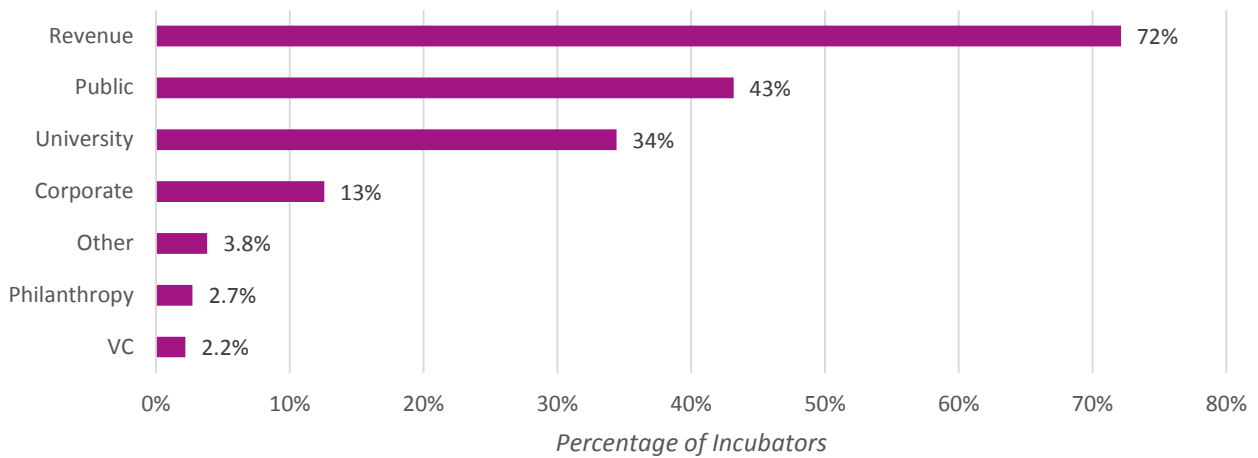
**Figure 2. Percentage of incubators offering different forms of business support.**

Total number of incubators that provided information on the business support they offer = 205. See Appendix for a description of each type of support offered.

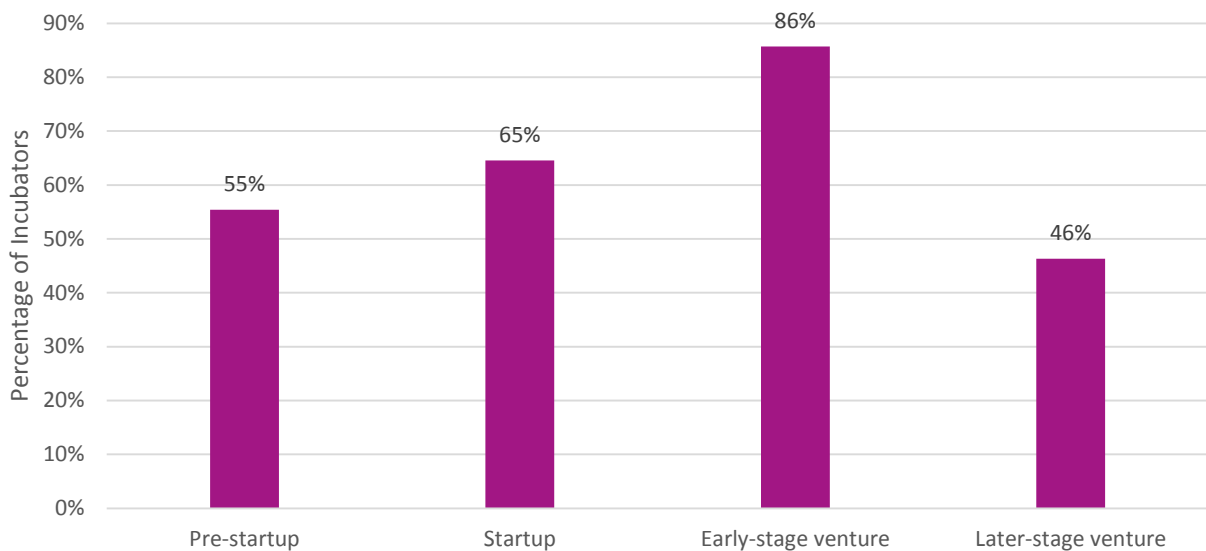
The majority of incubators are at least partly self-funded through the membership fees / rent they charge their residents.<sup>13</sup> Of the 72% of incubators that reported charging fees, the average charge is around £250 per person per month (though these fees vary greatly from £100 per month for a hot desk to £1860 for laboratory and office space). Incubator fees are often subsidised using public or university funding; philanthropic and corporate funding was much less commonly reported (Figure 3).

Although some incubators cater to entrepreneurs in the pre-startup stage through to later-stage scaling, the majority of incubators focus on early-stage ventures (Figure 4). While there is not typically a fixed duration for residence in an incubator, the average reported stay is around two years.

<sup>13</sup> Note that data were collected on the presence or absence of different funding sources, not on the amount received from these sources.

**Figure 3. Percentage of incubators receiving funding from different sources.**

Total number of incubators that provided information on funding sources = 146. Please note that this graph shows the percentage of incubators receiving funding from, not the amount of funding from these sources. Each incubator can have multiple sources of funding. The category 'Other' may include business angel / family office<sup>14</sup> investment as well as subsidies from other revenue streams of the business running the incubator.

**Figure 4. Percentage of incubators accepting each stage of business.**

Total number of incubators that provided information on stages of business eligible to their programme = 173. Each incubator can support multiple stages of business.

<sup>14</sup> Family offices are private wealth advisory firms serving ultra-high-net-worth investors.

## Overview of findings about accelerators

We identified 163 accelerators currently active in the UK, considerably more than previously estimated (see Appendix; Table A1). These programmes support an estimated 3,660 new businesses per year - slightly more than the number supported by incubators.<sup>15</sup> Accelerator programmes provide intensive business support to cohorts comprising, on average, 16 businesses, over an average time period of just over 6 months (27 weeks).

Mentoring is by far the most common form of business support reportedly offered by accelerators, and is provided by 85% of programmes (Figure 5). Following this, direct funding is provided by 61% of programmes (this is considerably more than for incubators, of which only 14% provide direct funding). Accelerators that reported providing funding offered an average of £39,000 per startup, via grants, loans, convertible notes or direct investment in return for equity.<sup>16</sup> This means that UK accelerators directly invest around £33 million in startups per year.<sup>17</sup> Of the 46% of accelerators that take equity in the businesses they support, the average amount of equity taken is 7%.

It is also common for accelerators to offer workspace,<sup>18</sup> seminars and workshops, networking connections (including potential customers) and access to investors. Only 17% of accelerators reported hosting demo days (opportunities to pitch to prospective investors) - which is surprisingly few, given that some interviewees considered these as one hallmark of an accelerator.<sup>19</sup> Less than 2% of accelerators reported providing laboratory space to startups, something which is much more common in incubators (25%).

---

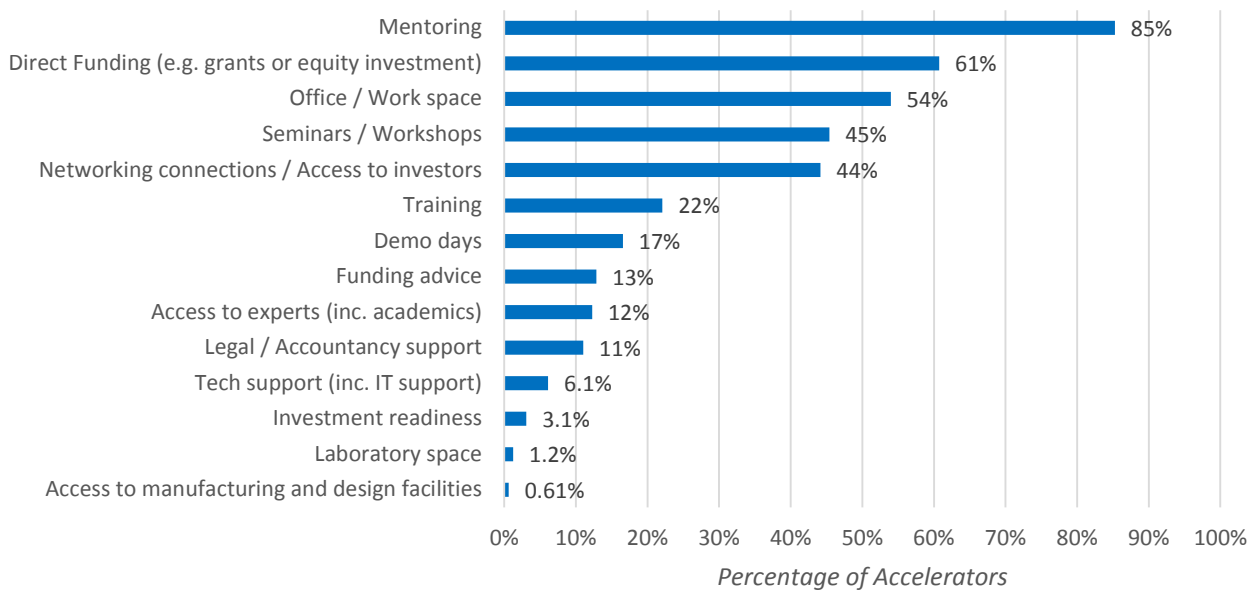
<sup>15</sup> The number of businesses supported was estimated by multiplying the average number of businesses supported per year (22.46) by the total number of number of accelerators identified (163) and rounding this number to the nearest 10 accelerators.

<sup>16</sup> Some accelerators charge fees for their support, which is taken from this funding. Those that do charge fees, charge an average of £5,346 per business. Others charge equity or profit sharing in exchange for the non-financial support they offer.

<sup>17</sup> Where accelerators gave information on the number of businesses they supported and said they made investments but did provide information on how much they invested, we estimated the total amount that accelerator invested by extrapolating from the average amount invested by accelerator which did give this information (8% of the accelerators studied did not provide information regarding their investment activities i.e. the amount of money invested in participating startups).

<sup>18</sup> 54% of accelerators reported providing office / workspace. This is in comparison to incubators, all of which provide office / workspace.

<sup>19</sup> We believe that this percentage is probably actually a lot higher because it is conventional for accelerator programmes to end with a demo day and so may have been considered too obvious to mention.

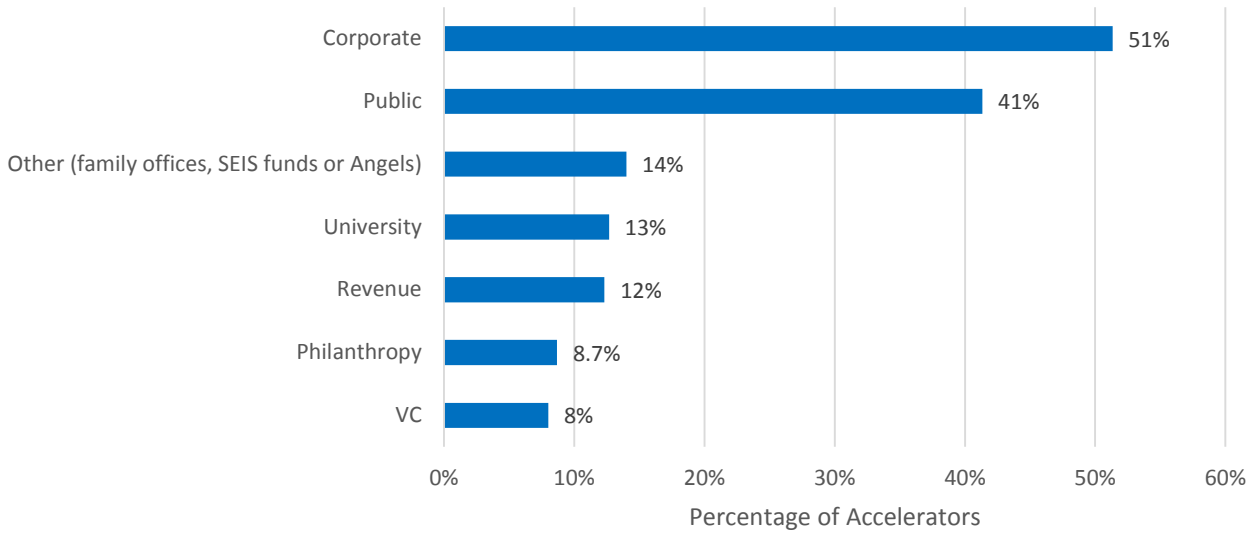
**Figure 5. Percentage of accelerators offering different forms of business support.**

Total number of accelerators that provided information on the business support they offer =163. See Appendix for a description of each type of support offered.

One of the unexpected results of our research concerns sources of funding. The accelerator model is seen by many as having evolved to provide deal-flow and venture-style returns for seed funds (hence their alternative name of ‘seed accelerators’). However, whilst VC funds were responsible for most of the early accelerators, our research shows this has now changed considerably. In fact, this study shows that in the UK accelerators are now most commonly funded by corporates, including corporate VC units (51%).<sup>20</sup> Examples include: Barclays Eagle labs and Barclays Accelerator, Microsoft Ventures, Wayra (O2 Telefónica) and JLAB (John Lewis). Some of the reasons for this are discussed below.

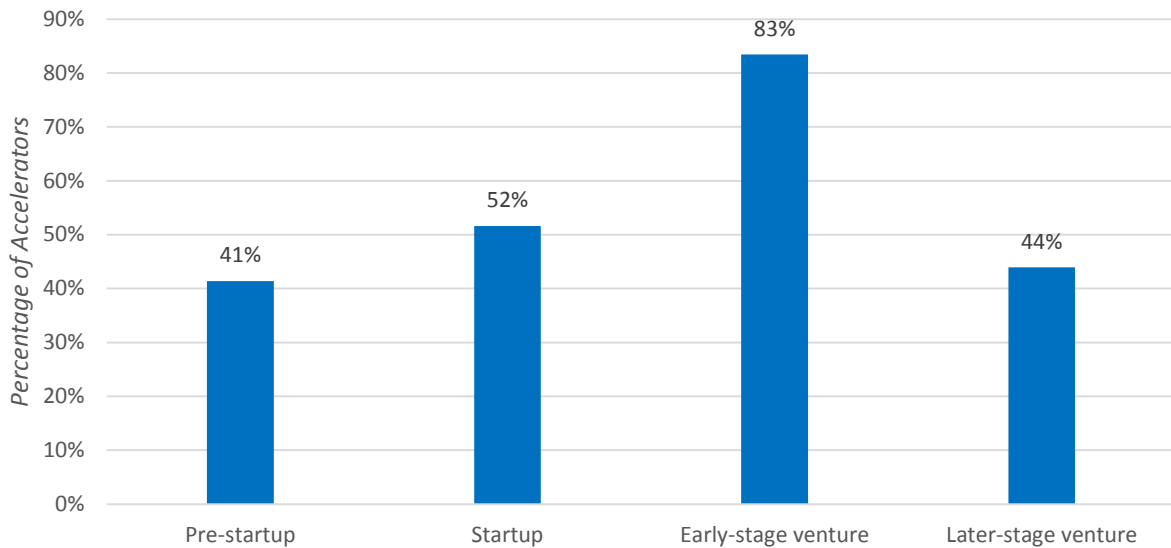
Public funding was also reported as having been received by a large number (41%) of accelerators (Figure 6). This was received from a variety of sources, from ERDF to LEPs, in different quanta, and is discussed in more detail below.

<sup>20</sup> Please note that data were collected on the presence / absence of different funding sources, not on the amount received from these sources.

**Figure 6. Percentage of accelerators receiving funding from different sources.**

Total number of accelerators that provided information on funding sources = 150. Each accelerator can have multiple sources of funding. The category 'Other' may include business angel / family office investment as well as subsidies from other revenue streams of the business running the accelerator.

Another surprise finding from the study concerns the stage of admission to the programme. A common perception from the academic literature is that accelerators tend to focus on earlier stages compared to incubators, and may indeed serve as feeder programmes for incubators. Whilst this may have been true historically, this survey actually shows that accelerators cater to a similar profile of business stages as incubators, taking entrepreneurs from the pre-startup stage through to later-stage scaling ventures, but focusing mostly on early-stage ventures (Figure 7). This is an unexpected result, and might possibly be due to differences in interpretation of 'early-stage' by reporting organisations; however, if true, it suggests that accelerators are best seen as alternatives to incubators rather than precursors.

**Figure 7. Percentage of accelerators accepting each stage of business.**

Total number of accelerators that provided information on stages of business eligible to their programme = 157. Each incubator can support multiple stages of business.

## Sector distribution

A large proportion of UK incubators (45%) and accelerators (30%) do not have a particular sectoral focus. Of those that do, the most common category is non-specific digital technology - which in this context includes broad horizontal themes like Internet of Things (IoT) and big data (see Figures 8 & 9).

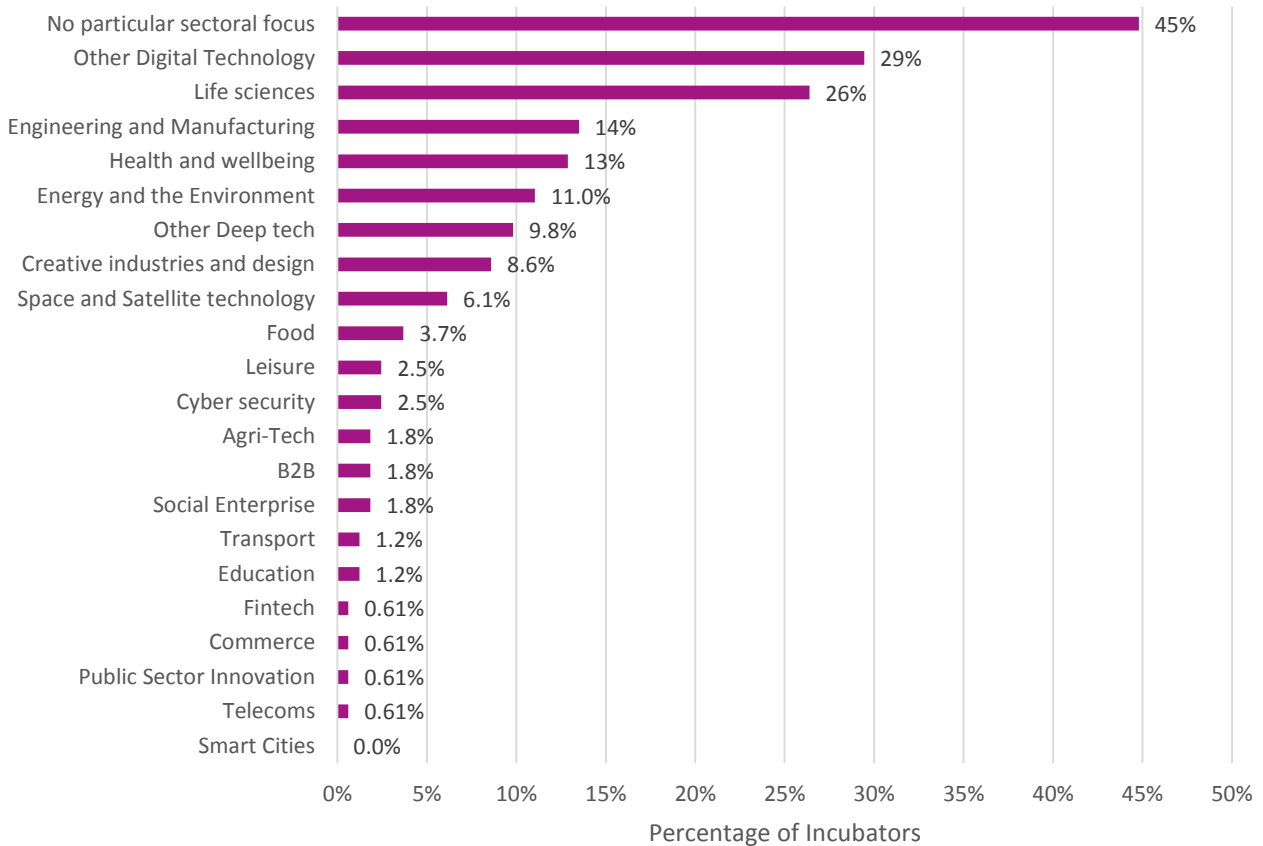
While there are several incubators with a focus on non-specific digital technologies, very few concentrate on a particular current digital trend such as Fintech, Agritech, Edtech, Cybersecurity or Smart cities (Figure 8). The opposite is true of accelerators, with several focussing on these fast-growing sectors (Figure 9). Fintech is a particularly popular sector among UK accelerators with 12 specialist programmes including Barclays Fintech Accelerator, Octopus Labs and the Bank of England's Fintech Accelerator (opening April 2017).

A high proportion of incubators focus on Life Sciences and other science-based sectors such as Engineering and Manufacturing, Health and Wellbeing, Energy and the Environment, and Space and Satellite technology (Figure 8). A focus on the non-digital sciences is far less common for accelerators. However, while life sciences are not very well-represented, several accelerators (16 in total) focus on the related Health and Wellbeing sector (Figure 9), likely reflecting the rise in popularity of digital health startups in the last 7 years (CB Insights, 2017). Other key sectors of focus for accelerators are B2B and Social Enterprise, both of which are the focus of several accelerators. Furthermore, the Creative Industries and Design sector is reasonably well represented by both incubators (13 in total) and accelerators (11 in total).

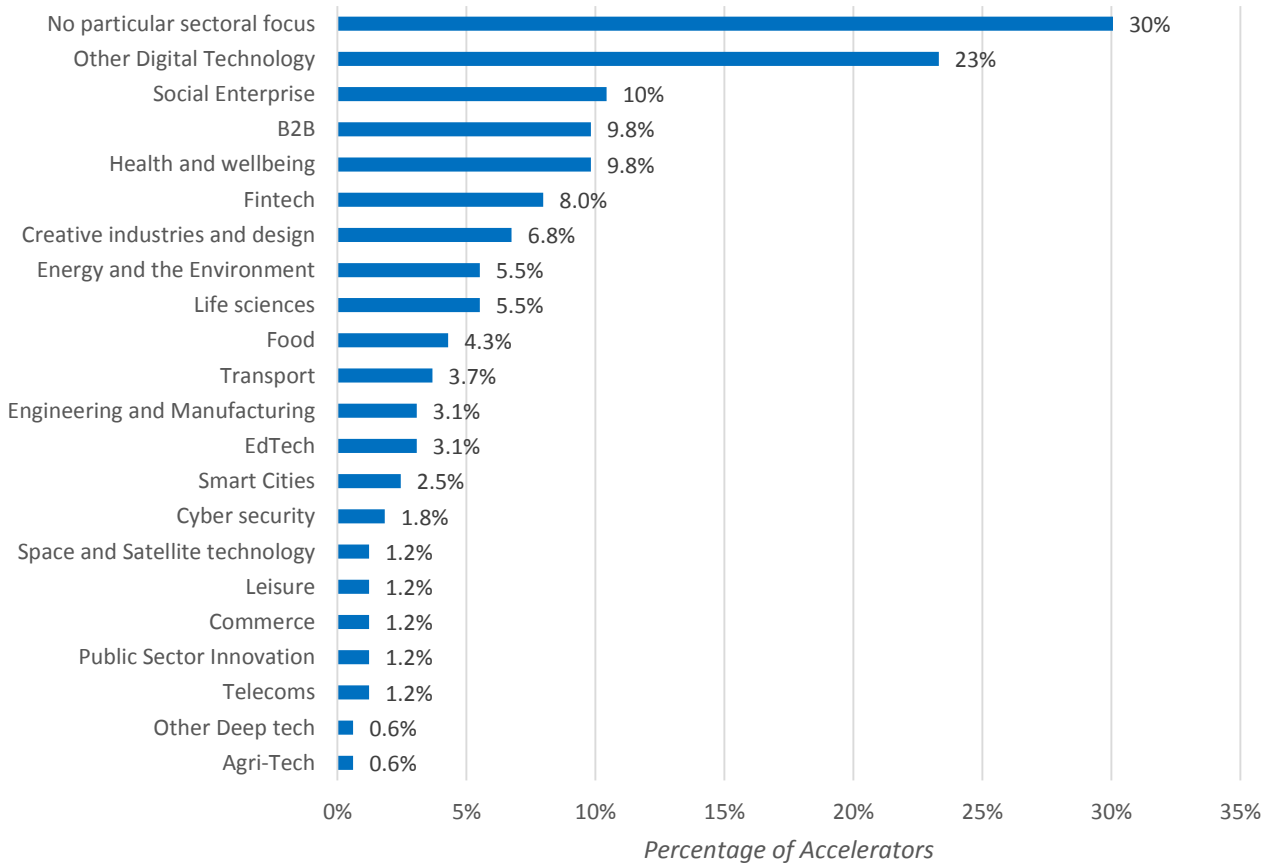


We also note that there is considerable overlap between the sectors we have identified as being rich in incubator and accelerator activity, such as digital (including IoT, Big Data and Artificial Intelligence), Life Sciences (including Synthetic Biology and Genomics), Agritech, Satellite technology, Energy and other Deeptech (including Nanotechnology, Robotics, Quantum technologies), and those highlighted in recent reports on key innovative technologies of the future (IPO, 2014; OECD, 2016).

**Figure 8. Percentage of total incubators with specific sectoral focus.**



Total number of incubators that provided information on their sectoral focus = 205.

**Figure 9. Percentage of accelerators with specific sectoral focus.**

Total number of accelerators that provided information on their sectoral focus = 163.

### Which sectors are comparatively less supported by incubators and accelerators?

One relatively crude way to address that question is to look at the distribution of accelerators and incubators, relative to the size of industry sectors. To do this, we allocated incubators and accelerators to the Standard Industrial Classification (SIC) codes most relevant to the sector(s) of focus.<sup>21</sup> We then compared the numbers of incubators and accelerators under each SIC code with the estimated Gross Value Added (GVA) of that SIC division. The GVA of a SIC division measures the contribution to the economy of that sector in the United Kingdom and is used in the estimation of Gross Domestic Product (GDP).

<sup>21</sup> SIC codes are used in classifying business establishments and other statistical units by the type of economic activity in which they are engaged; they were last revised in 2007. Where a sector used in our dataset fits into multiple SIC code divisions, we equally distributed the incubators and accelerators that focus on that sector between the multiple corresponding SIC divisions. More information on which sectors correspond with which SIC divisions can be found in Appendix Table A6.

We found that there is no relationship between a SIC division's GVA contribution and the number of incubators or accelerators catering to that division.<sup>22</sup> For instance, the SIC division 'Real estate activities' contributes the largest amount to GVA compared to all other sectors. Therefore, if programmes reflected the GVA of sectors, then we would see many more relating to real estate; at present, however, there is only one accelerator dedicated to real estate: Pi Labs (see Appendix; Figure A1).

A more relevant analysis may be to look not at GVA but at the number of new businesses per sector, as measured by the ONS.<sup>23</sup> Such analysis again suggests a low number of both incubators and accelerators, relative to the number of new businesses, in the real estate and retail sectors, as well as in construction; in these industries there is less than one accelerator and incubator for every four thousand new businesses (Figure 10 & 11). In addition, new businesses in the transport and storage and finance and insurance sectors have relatively few focused incubators to which they can apply - though there are plenty of Fintech accelerators. It is important to note that this analysis does not take into account the relative innovation intensity of different sectors, nor other substantial differences.

We also note that the first wave of Science & Innovation Audits (SIAs), recently prepared for BEIS, identified potential high growth sectors for various regions, along with specific barriers to growth (BEIS, 2016b).<sup>24</sup>

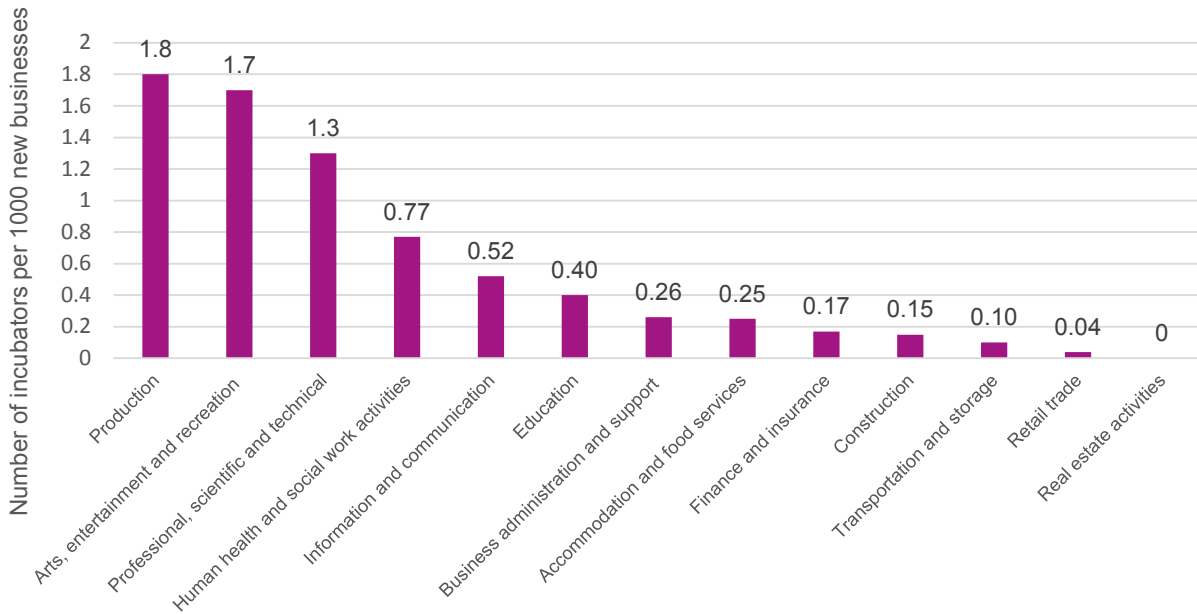
---

<sup>22</sup> The capacity of incubators and accelerators would have been a preferable measure, rather than their number, but regrettably this data was incomplete. Clearly, however, some accelerators and incubators support more businesses than others.

<sup>23</sup> Business birth rates for SIC code divisions were obtained for 2015 from the Office of National Statistics and are based on new registrations for VAT and PAYE ([www.ons.gov.uk/businessindustryandtrade/changetobusiness/businessbirthsdeathsandsurvivalrate](http://www.ons.gov.uk/businessindustryandtrade/changetobusiness/businessbirthsdeathsandsurvivalrate))

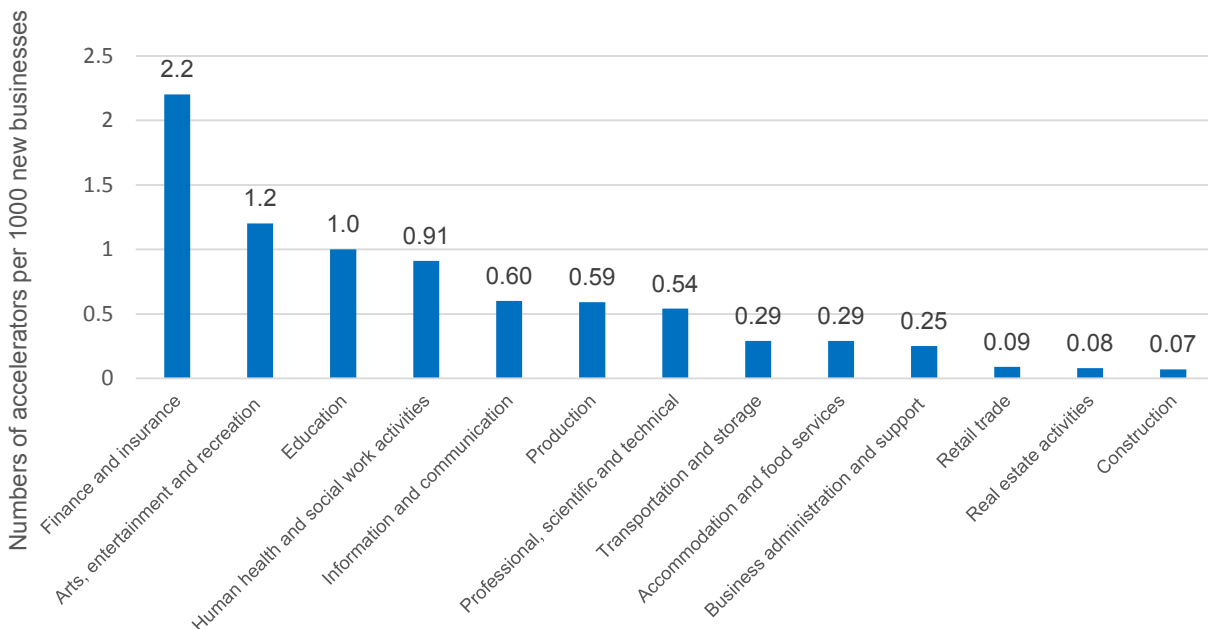
<sup>24</sup> For Edinburgh and the South East Scotland City region, the potential high growth sector identified was digital technology; for Greater Manchester and East Cheshire these were identified as Digital, Energy and Industrial Biotechnology sectors; for The Midlands Engine these were Transport, Medical and Pharma, and Energy and Low-carbon sector; for Sheffield City Region and Lancashire these were Aerospace, Nuclear Energy, Rail and Healthcare; and for the South West England and South East Wales these were Advanced Engineering and Digital.

**Figure 10. Number of incubators per 1000 new businesses.**



Total number of incubators that provided information on their sectoral focus = 205. The Production SIC code division is an amalgamation of the Mining and Quarrying, Manufacturing, Electricity, gas, steam and air conditioning supply and Water supply, sewerage, waste management and remediation activities divisions.

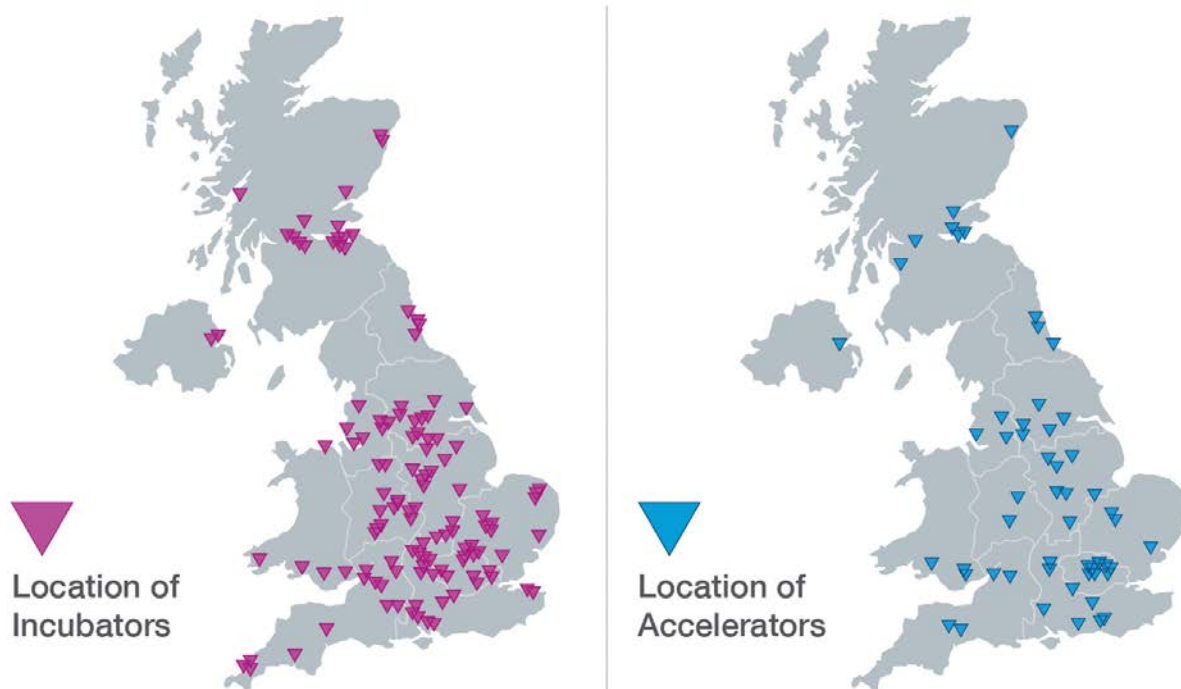
**Figure 11. Number of accelerators per 1000 new businesses.**



Total number of accelerators that provided information on their sectoral focus = 163. The Production SIC code division is an amalgamation of the Mining and Quarrying, Manufacturing, Electricity, gas, steam and air conditioning supply and Water supply, sewerage, waste management and remediation activities divisions.

## How are incubators and accelerators distributed across the UK?

**Figure 12. Map of UK incubators and accelerators.**



Triangles represent the location of single incubators (magenta) and accelerators (blue) according to registered postcode. Please note that in areas of high accelerator or incubators density (e.g. London), triangles may overlap meaning that individual incubators and accelerators are not distinguishable.

### Geographical distribution across regions and countries

In absolute terms, London has both more incubators ( $n = 29$ ) and more accelerators ( $n = 81$ ) than any other UK region. Accelerators are particularly concentrated in the capital, with 58% of UK accelerators based here. Incubators are spread more evenly around the country with only 15% based in the capital.

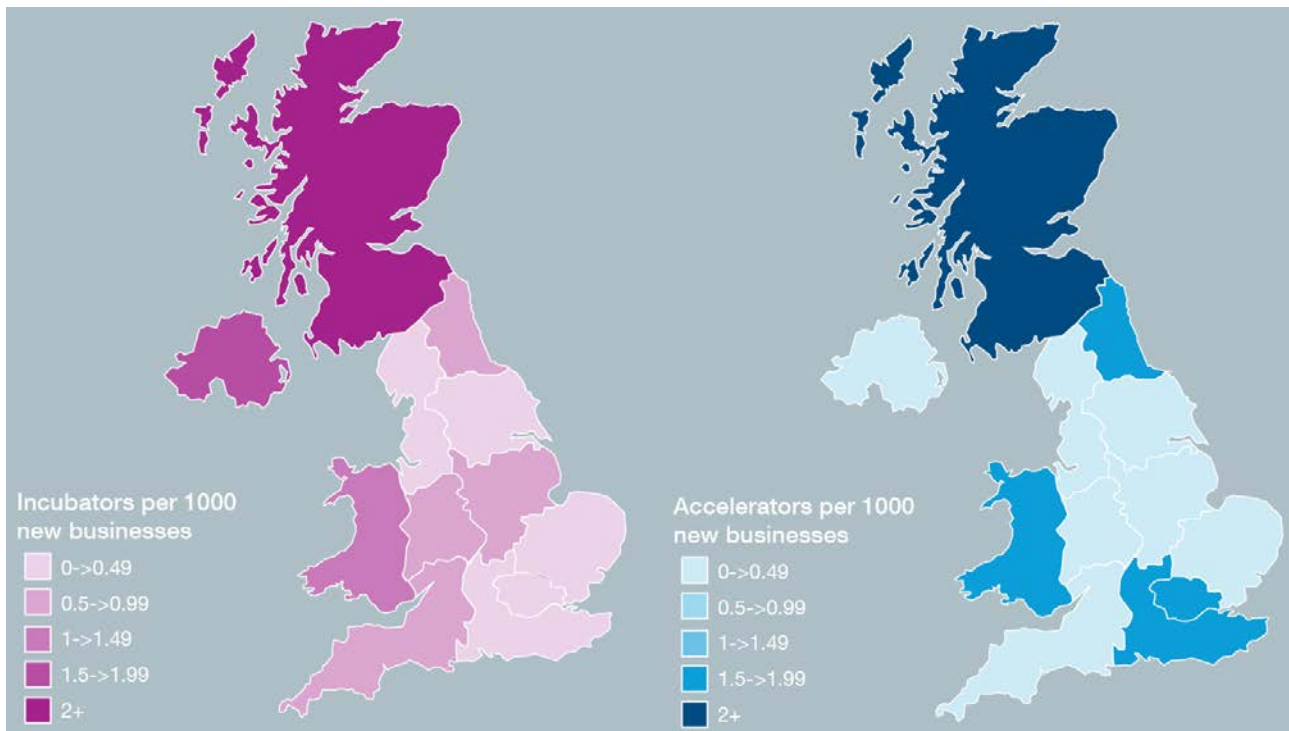
However, as with the sectoral analysis above, some standardisation is required. When weighted by new businesses formation rates,<sup>25</sup> London actually has a lower concentration of accelerators than Scotland, and one of the lowest concentrations of incubators of all UK regions.

Scotland follows closely behind London in the total number of incubators ( $n = 23$ ) and accelerators ( $n = 10$ ) and has the most incubators and accelerators per 1000 new businesses. Furthermore, Northern Ireland and Wales have low total numbers of incubators and accelerators, but among the highest number per 1000 new businesses (see Figure 12).

<sup>25</sup>[www.ons.gov.uk/businessindustryandtrade/changestobusiness/businessbirthsdeathsandsurvivalrates](http://www.ons.gov.uk/businessindustryandtrade/changestobusiness/businessbirthsdeathsandsurvivalrates)

The North West (n = 18), East of England (n = 17) and Yorkshire and Humber (n = 12) all have a comparatively large total numbers of incubators, although when one takes into account the high rate of business formation in these areas, these areas rank much lower. There are a low number of accelerators in the East of England (n = 5), South East (n = 5) and South West of England (n = 3), despite the high number of businesses formed in these regions each year.

**Figure 13. Map of incubator and accelerator density (per 1000 new businesses) in the UK.**



Business birth rates for different regions were obtained for 2015 from the Office of National Statistics and are based on new registrations for VAT and PAYE across all business sectors.

**Table 2. Distribution of incubators by NUTS 1 regions and countries.**

<b>Region and country(NUTS 1)</b>	<b>Number of incubators</b>	<b>Percentage of total incubators</b>	<b>Number of incubators per 1000 new businesses</b>
<b>Scotland</b>	23	11.11	2.49
<b>Northern Ireland</b>	3	1.45	1.75
<b>Wales</b>	6	2.9	1.48
<b>South West of England</b>	21	10.19	0.8
<b>West Midlands</b>	21	10.19	0.72
<b>East Midlands</b>	18	8.74	0.71
<b>South East of England</b>	32	15.53	0.58
<b>North West of England</b>	19	9.22	0.52
<b>North East of England</b>	5	2.43	0.52
<b>East of England</b>	17	8.25	0.48
<b>Yorkshire and the Humber</b>	12	5.83	0.47
<b>London</b>	29	14.08	0.29

Number of incubators, percentage of total incubators and number of incubators per 1000 new businesses in each NUTS 1 region. The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the economic territory of the EU for statistical purposes; NUTS 1 refers to major socio-economic regions.

**Table 3. Distribution of accelerators by NUTS 1 regions and countries.**

<b>Region and country(NUTS 1)</b>	<b>Number of accelerators</b>	<b>Percentage of total accelerators</b>	<b>Number of accelerators per 1000 new businesses</b>
<b>Scotland</b>	10	6.17	5.83
<b>London</b>	81	50.31	0.8
<b>Wales</b>	3	1.85	0.74
<b>North East of England</b>	5	3.11	0.52
<b>West Midlands</b>	11	6.83	0.37
<b>Northern Ireland</b>	3	1.85	0.32
<b>East Midlands</b>	8	4.97	0.32
<b>Yorkshire and the Humber</b>	8	4.97	0.31
<b>North West of England</b>	10	6.21	0.27
<b>South West of England</b>	7	4.35	0.27
<b>South East of England</b>	10	6.21	0.18
<b>East of England</b>	5	3.11	0.14

Number of accelerators, percentage of total accelerators and number of accelerators per 1000 new businesses in each NUTS 1 region. NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the economic territory of the EU for statistical purposes; NUTS 1 refers to major socio-economic regions.



## Geographical distribution across Local Enterprise Partnerships

Taking a more granular look at England's thirty-nine Local Enterprise Partnerships (LEPs), this study did not find any evidence of an incubator or accelerator facility in two LEPs.

This study did not find any evidence of an incubator in 4 LEPs: Coast to Capital, Cumbria, Gloucestershire, Tees Valley<sup>26</sup> and The Marches (see Appendix; Table A3). In the Cornwall and Isles of Scilly, Oxfordshire, and Worcestershire, this study found six, eight and five incubators, respectively; these LEPs also have the most incubators per 1000 new businesses formed each year.

In addition, this study did not find any evidence of an accelerator in a large proportion of LEPs (15 in total) (see Appendix; Table A4). These included Lancashire, New Anglia and Thames Valley Berkshire, although these LEPs have a relatively large number of new businesses formed annually.<sup>27</sup> The London Enterprise Zone (n = 81), this study found the second most accelerators per 1000 businesses, after Greater Birmingham (n = 10).

Looking at the number of accelerators and incubators per 1000 new businesses, the South East seemed to have a lower number of incubators and accelerators compared to other LEPs. This study found three accelerators and six incubators in the South East, despite it having the second highest business birth rate. Furthermore, this study found just one accelerator in the Enterprise M3 LEP region, which, when considering the high business birth rate in the area,<sup>28</sup> is comparatively low. However, the low number of accelerators found in the Enterprise M3 region may be offset by its proximity to London.

Since, Local Enterprise Partnerships do not exist for Scotland, Wales or Northern Ireland, for these regions, we instead analysed the number of incubators and accelerators at the NUTS 2 sub-regional level.<sup>29</sup> This analysis showed that Scotland's incubators and accelerators are largely concentrated in Eastern Scotland (see Appendix; Table A5 and A6), with 83% of Scotland's incubators and 55% of its accelerators being located in this region. This may be unsurprising due to the fact that the capital Edinburgh is located in this sub-region. In comparison, South Western Scotland, which includes Scotland's largest city Glasgow, only contains 13% of Scotland's incubators and 36% of its accelerators, but has a higher business birth rate than Eastern Scotland.<sup>30</sup> This study didn't find any evidence of accelerators and only one incubator in the Highlands and Islands. In addition, while three incubators were found in North Eastern Scotland, only one incubator was found in this region.

---

<sup>26</sup> Tees Valley, despite of having no incubators has a high number of accelerators with 1.03 accelerators per 1000 new businesses.

<sup>27</sup> Lancashire, New Anglia and Thames Valley Berkshire LEPs all had business birth rates of more than 5,000 in 2015.

<sup>28</sup> The business birth count for Enterprise M3 was 9,190 in 2015.

<sup>29</sup> The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the economic territory of the EU for statistical purposes; NUTS 2 refers to basic regions for the application of regional policies.

<sup>30</sup> In 2015 the business birth count for the Eastern Scotland and South Western Scotland was 8,255 and 8,600, respectively.

This study found that West of Wales has twice the number of both incubators and accelerators as the East of Wales, although the business rate in the East of Wales is only around 25% lower than the West.<sup>31</sup>

Northern Ireland is not subdivided according to the NUTS classification system and so was not analysed in finer detail in this study.

## What catchment areas do incubators and accelerators have?

A different question concerns catchment area of programmes – that is, the geographical area from which incubators and accelerators accept businesses to participate in their programme.

A high proportion of both incubators and accelerators reported being open to national or international applicants in principle, although accelerators typically reported less regional or university (i.e. students, staff and alumni) and more international focus than incubators (Figure 13 & 14).

However, the difference in practice seems to be even greater than the difference in principle. A sampling of programmes, examining the distance between their location and the registered addresses of their portfolio businesses, revealed that UK businesses relocated an average of 35 miles to participate in an incubator and 61 miles to participate in an accelerator.<sup>32</sup> In addition, despite 27% of incubators claiming to take businesses from abroad, our sampling showed that only around 1% of businesses in UK incubators originated from outside the UK, compared with around 18% of businesses in UK accelerators. On all measures, then, incubators seem to be more locally-focussed than accelerators.

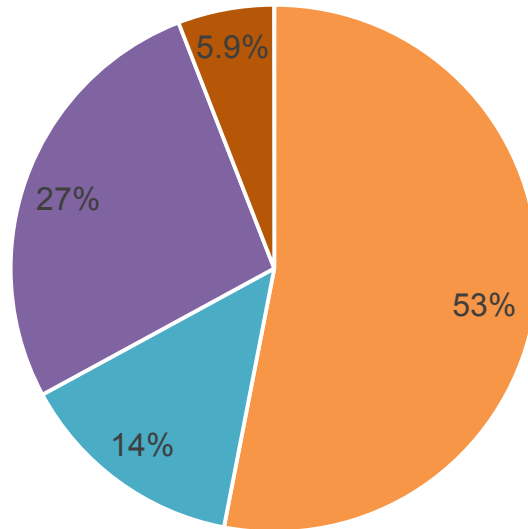
Further to this, if the proportion of non-UK businesses supported by our sample of accelerators was extrapolated to the entire population this would amount to an estimated 650 businesses a year. If these businesses remain in the UK after the programme has finished (which is yet to be determined), this would be a significant method of attracting potential high-growth businesses into the country.

---

<sup>31</sup> In 2015 the business birth count for the West of Wales and East of Wales was 6,410 and 4,935, respectively.

<sup>32</sup> The “as the crow flies” distance (miles) was measured from the postcode of a small sample of incubators (n = 6) and accelerators (n = 9) to the registered postcode (according to Companies House or the startups’ website) of the UK-based companies in their portfolios (n = 213 and n = 492 respectively).

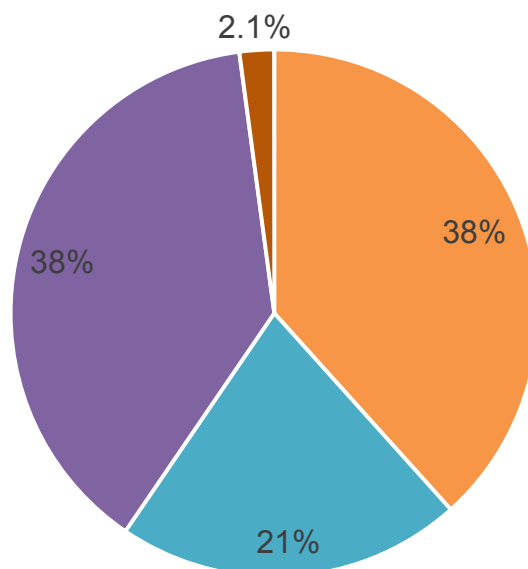
**Figure 14. Percentage of incubators reporting regional, national, international and university wide catchment areas.**



■ Regional ■ National ■ International ■ University

Total number of incubators that provided information on their catchment areas = 168.

**Figure 15. Percentage of accelerators reporting regional, national, international and university wide catchment areas.**



■ Regional ■ National ■ International ■ University

Total number of accelerators that provided information on their catchment areas = 143.

## Public funding by region and sector

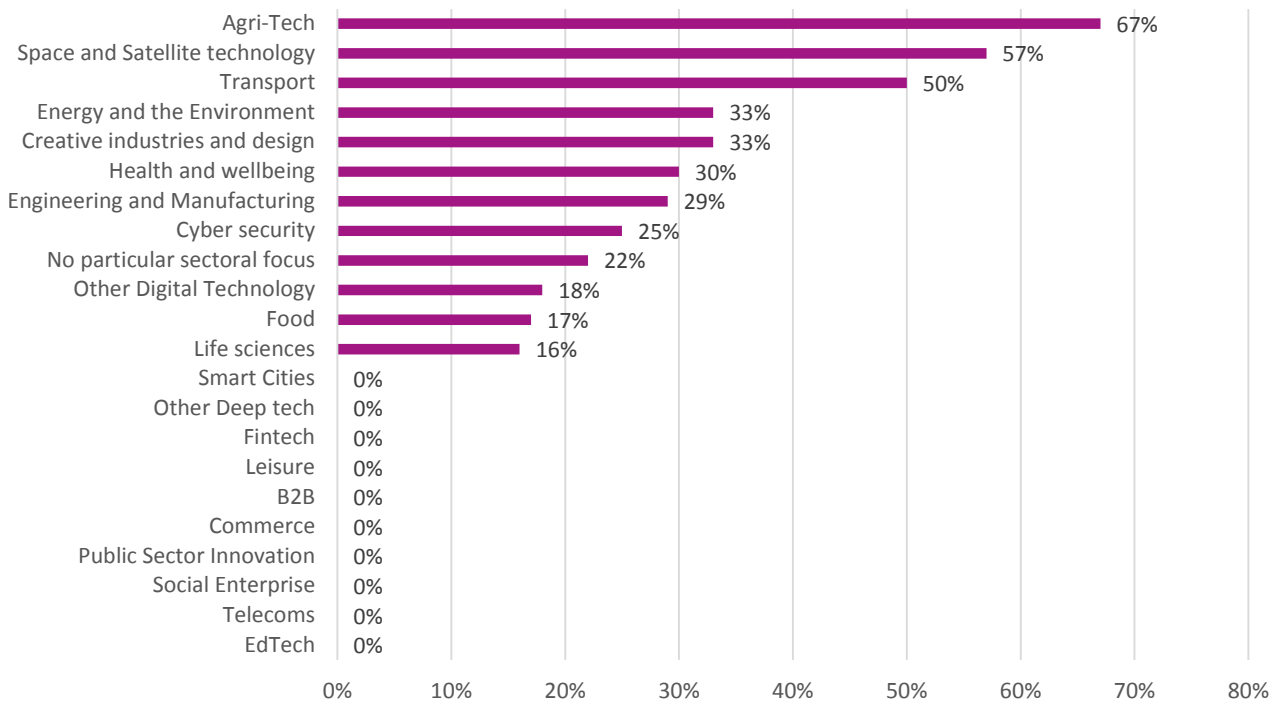
As discussed earlier, a significant number of incubators and accelerators receive public or university funding - although accelerators are, as a whole, less dependent than incubators on these sources.

Both incubators and accelerators rely heavily on public funders including local enterprise partnerships, Innovate UK, central government and Big Lottery Fund as well as from the European Regional Development Fund (ERDF) which funds at least 60 programs and facilities in our dataset. The percentage of UK accelerators (41%) receiving public funding, including ERDF funding, is similar to the percentage receiving public funding across Europe (40%) as reported in GUST's European Accelerator report (GUST, 2015).

It is notable that more than half of the incubators and accelerators that focus on Space and Satellite Technology, as well as more than half of the incubators that focus on Agritech and Transport, are wholly reliant on these sources (Figure 16 & 17).

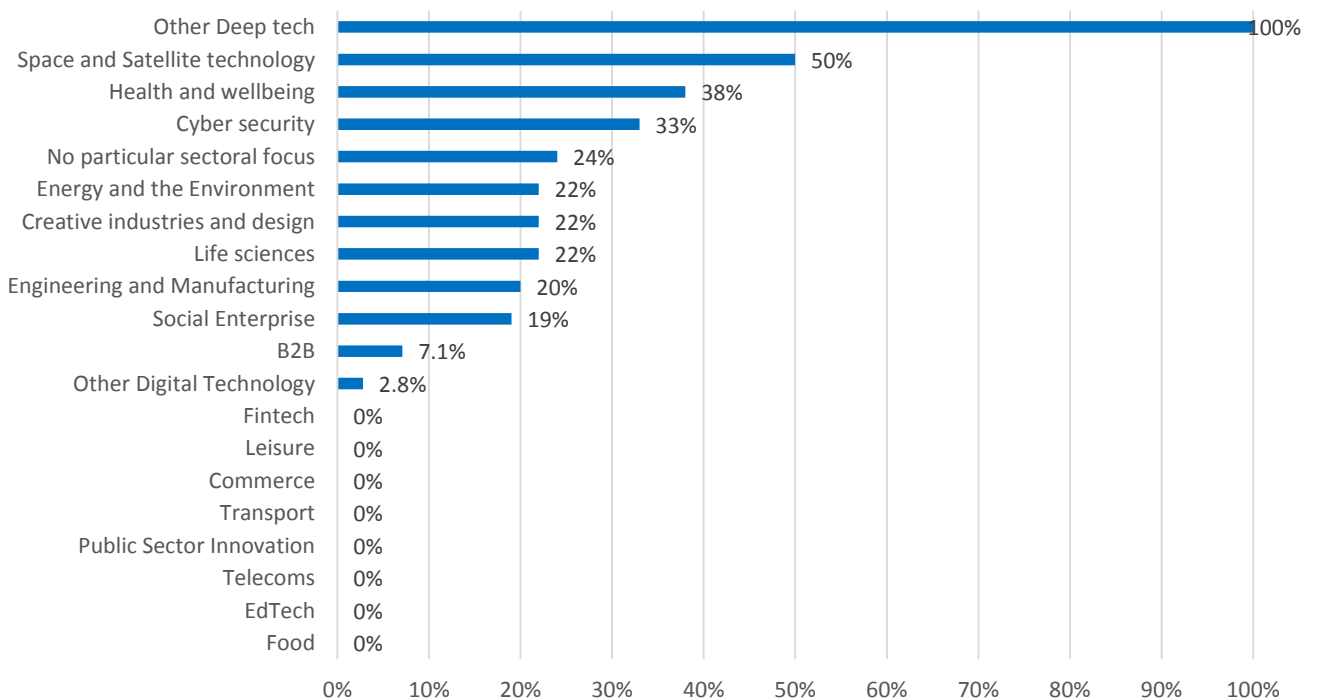
Additionally, it is notable that all five incubators in the North East of England reported being completely funded by public or university money (Figure 18). Incubators in Wales, Scotland, and the West Midlands also have reasonably high reliance on these funding sources, with over 35% of their incubators depending solely on public or university funding. There are no regions that are 100% reliant on public or university funding of accelerators (Figure 19); however, Wales, Northern Ireland and the West Midlands all rely heavily on this funding, which is the only source of funding for more than half of their acceleration programs.

**Figure 16. Percentage of incubators focussing on each sector that rely solely on university and public funding.**



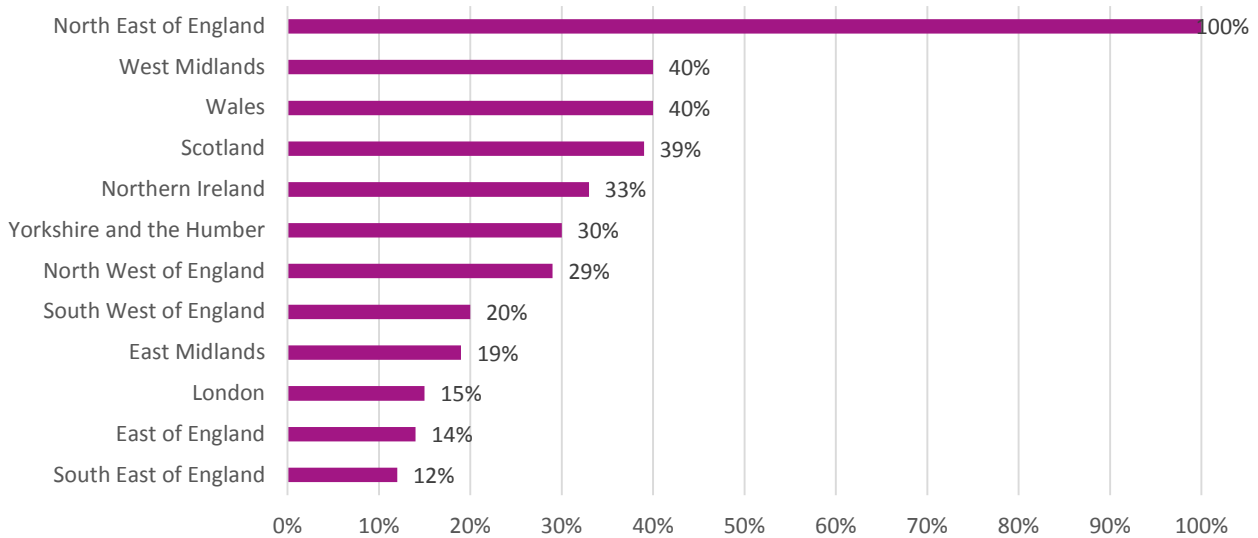
Total number of incubators that provided information on their sectoral focus and funding sources = 146.

**Figure 17. Percentage of accelerators focussing on each sector that rely solely on university and public funding.**



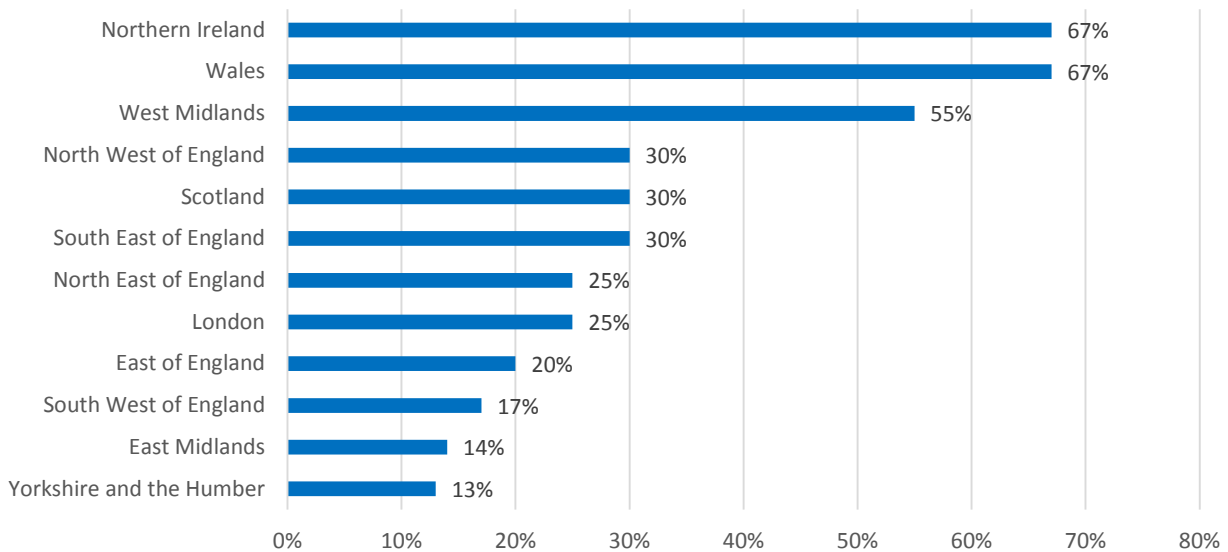
Total number of incubators that provided information on their sectoral focus and funding sources = 150.

**Figure 18. Percentage of incubators in each region and country (NUTS 1) which rely solely on university and public funding.**



Total number of incubators that provided information on their location and funding sources = 183.

**Figure 19. Percentage of accelerators in each region and country (NUTS 1) which rely solely on university and public funding.**



Total number of accelerators that provided information on their location and funding sources = 150.

## Overview of findings on pre-accelerators, virtual incubators and virtual accelerators

Alongside incubators and accelerators, we identified emerging variants of these models including: pre-accelerator programmes, which provide very early stage support to entrepreneurs who aim to join an accelerator programme in the future, and virtual accelerators and incubators, which aim to provide support similar to their physical counterparts, but without the provision of work, office or laboratory space, and with services such as mentoring and training being provided online. In this section we present insights from our dataset on these variant models.

### Pre-accelerators

We identified 11 pre-accelerator programmes currently active in the UK. These programmes support an estimated 240 businesses per year. Support is given in cohorts of, on average, 18 entrepreneurs over an average period of three weeks. Four out of the eleven pre-accelerator programmes studied charge fees to participate. Of those that charge, the average fee for the programme is £356.

Support offered to entrepreneurs in pre-accelerator programmes most commonly includes mentoring, office / work space and networking connections / access to investors, but some also offer funding advice, demo days and training. None of the pre-accelerators offer any direct funding or take equity in businesses. On top of the fees they charge entrepreneurs, pre-accelerators receive funding from a combination of corporate, VC, public, university, philanthropic and business angel sources.<sup>33</sup>

The majority of pre-accelerators have no particular sectoral focus (six programmes) or a non-specific digital focus (four programmes). However, one, Cyber London's HutZero programme, has a particular focus on cyber security. Most pre-accelerator programmes are based in London (seven programmes), but, there are also programmes in Hatfield (one programme), Newcastle (two programmes) and Manchester (one programme).

### Virtual incubators and accelerators

Four virtual incubator and seven virtual accelerator programmes were identified as currently active in the UK, supporting around 1,200 and 340 new businesses per year, respectively.<sup>34</sup>

All four UK-based virtual incubator programmes are free of charge to the pre-startup and early-stage ventures that they support. None of them offer direct funding or take equity in the businesses they support. Two of the four virtual incubators have no particular sectoral

---

<sup>33</sup> Only 2 out of 11 pre-accelerators receive public funding.

<sup>34</sup> Since this study has explicitly not attempted to examine effectiveness or cost effectiveness, we make no comment on the relative advantages or deficiencies of such programmes.

focus, the other two have a focus on non-specific digital technology and cleantech.<sup>35</sup> The average time spent participating in a virtual incubator is just over 18 months.

Three out of the seven virtual accelerators charge fees to entrepreneurs and of those that charge, the average cost is £150 for a programme lasting an average of seven weeks. Direct funding is offered by three virtual accelerators, which contribute between £10,000 and £400,000 for 5-12% equity. All but one virtual accelerator works with early stage ventures; MasterCard's Start Path, programme is the exception, catering for later-stage businesses. Two of the seven virtual accelerators have no particular sectoral focus, three have a focus on non-specific digital technology, one on Edtech and one on Fintech / Commerce.

This study has deliberately not tackled the question of effectiveness of programmes, and so cannot comment on the extent to which remote programmes can replace in-person mentoring and direct peer-to-peer interaction. However, by definition, such virtual programmes cannot satisfy the needs which some startups have for physical accommodation and laboratory space. Nevertheless, since virtual programmes can in principle be assessed from anywhere with an internet connection, it is worth asking whether the handful of virtual accelerators and incubators that were found could help new businesses in areas of the country which currently have less physical support.<sup>36</sup>

---

<sup>35</sup> Cleantech fits under the broader category of 'Energy and the Environment' used throughout this report.

<sup>36</sup> As well as the UK examples mentioned earlier, there are non-UK programmes which are open to UK startups. These include the European Virtual Accelerator (EUXCEL; Ireland), <hack.ether.camp>(decentralised) and One Million by One Million (US).



## 4. Trends

The incubator and accelerator dataset only provides a snapshot of programmes and facilities which were active at the point of data collection. It does not include programmes that were once active but have since closed, nor does it provide information on how programmes or facilities have changed over time. However, it does contain data relating to the year that programmes and facilities began supporting businesses, which can give us an indication of how the incubator and accelerator landscape has changed over time.

Analysing this data highlights several apparent trends:

- 1) very rapid growth in the number of programmes and facilities,
- 2) an expansion of incubators and accelerators outside London,
- 3) a rise of corporate accelerators, and
- 4) a diversification of models.

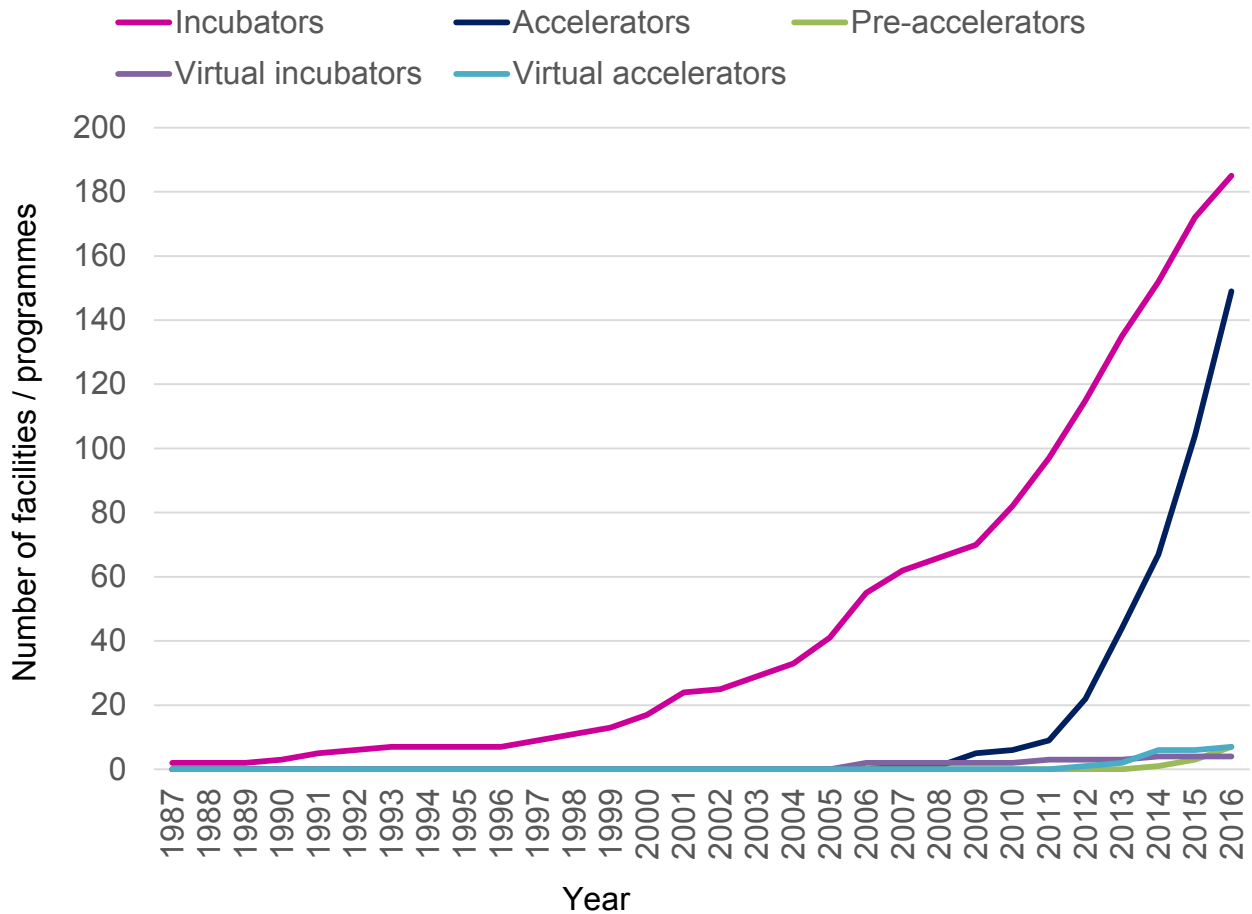
### Growth in number of programmes and facilities

The oldest incubator in the UK is St John's Innovation Centre in Cambridge, which launched in 1987.<sup>37</sup> This was followed by a handful more in the 90's and then a rapid increase after the turn of the millennium. While the rate of growth seems to have slowed slightly in the last few years, 111 of the 205 incubator programmes in our data base have been created since the beginning of 2012 (See Figure 20).

Accelerators are a much more recent phenomenon. Seedcamp launched in London in 2007, making it the oldest UK accelerator which is currently active. However, there appears to have been a step change around 2011, after which the number of programmes increased dramatically. Of the 163 accelerators in our data base, only a handful existed at the beginning of 2012. This growth has not slowed in recent years, with 45 new accelerators created in 2016 alone. If that rate of growth was maintained, the number of accelerators would overtake the number of incubators within the next 12 to 18 months.

---

<sup>37</sup> The Batavia Industrial Center in New York, established in 1959, is often considered the earliest example of business incubator in the world

**Figure 20. Growth of incubators and accelerators 1987 - 2016.**

Number of incubators, accelerators, pre-accelerators, virtual incubators and virtual accelerators 1987 - 2016. Note that this only includes programmes and facilities that are currently active, not organisations which have ceased operation.

## Accelerators are expanding to locations outside of London

The high concentration of accelerators in London is perhaps unsurprising, given that the capital is one of the most vibrant tech startup locations in the world, as well as an important hub for many VCs and corporates.<sup>38</sup> However, as the total number of accelerators has increased, the percentage which base themselves in startup clusters other than London - such as Birmingham, Bristol, Cambridge and Manchester - has steadily risen.

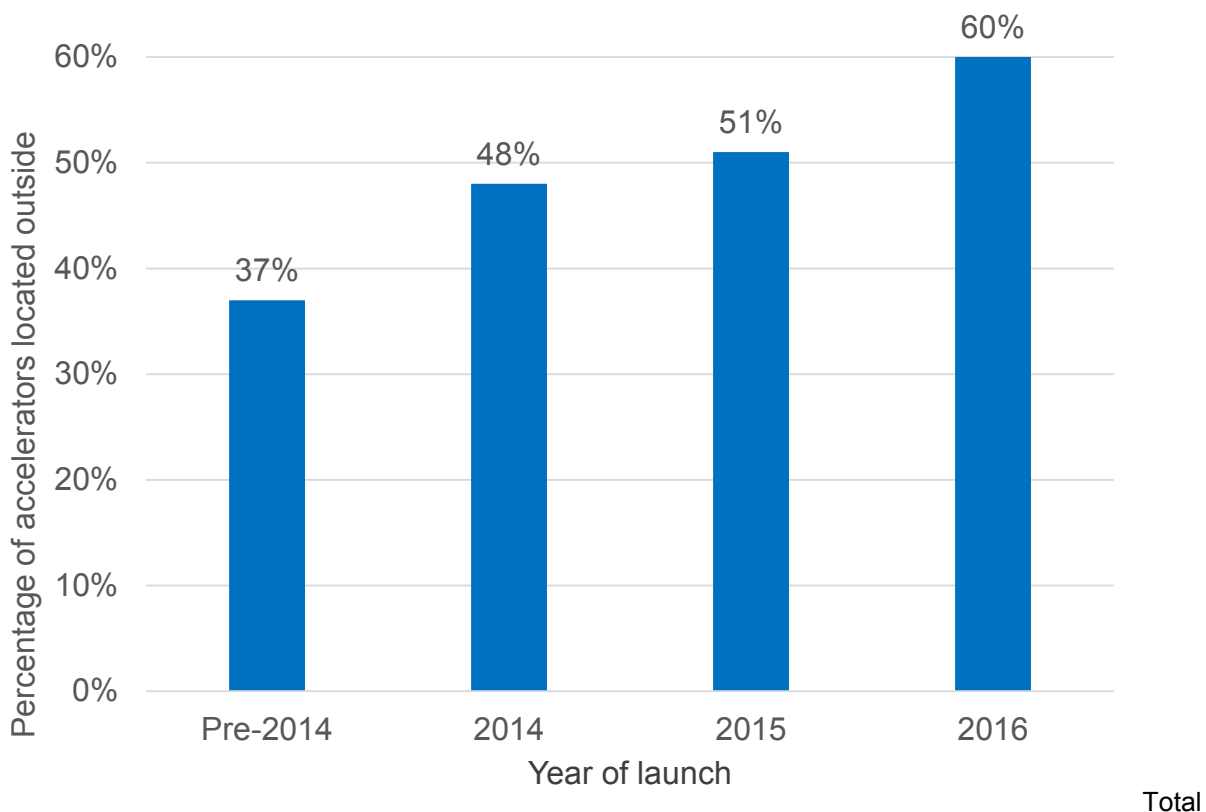
To illustrate this point: in 2014, fewer than half of the accelerators in our database which launched were based outside London, but in 2016, 60% of new accelerators set up outside the capital (Figure 21). One interpretation of this may be that, since accelerators compete for the best applicants, new programmes are tending towards less crowded environments.

<sup>38</sup> London ranked 1st for both startups and scale-ups in the 2016 European Digital City Index, which describes how well different cities support digital entrepreneurship (<https://digitalcityindex.eu/>).

(This may be true even of programmes which are national or international in nature, given that proximity to startups does still seem to matter, as shown above).

This trend was not observed for incubators, however, which have always been more evenly distributed throughout the UK, often in universities or out-of-town science and business parks. It also seems plausible that the different business model of incubators, which is based on charging rent or fees to residents, rather than competing for and taking equity in the best startups, creates different dynamics between them.

**Figure 21. Percentage of accelerators that launched in 2016, 2015, 2014, and pre-2014, which are based outside London.**



number of accelerators that launched in 2016 = 45; 2015 = 37; 2014 = 22 and pre-2014 = 41.

## Rise of the corporate accelerator

The proportion of accelerators in our data base created since 2014 that are funded by corporates is 65%, compared with only 29% of accelerators created before 2014.<sup>39</sup> This finding from our data base seems to indicate that the increased corporate interest in accelerators is one of the key factors which has driven the rapid growth of such programmes in recent years (Figure 22).

<sup>39</sup> This trend was not observed for incubators.

Overall, 51% of accelerators are currently funded by corporates. It is worth commenting, however, that this includes a number of accelerators which were not set up by corporates, but have attracted corporate funding in recent years. For instance, Seedcamp, the oldest active UK accelerator, has received investment from four corporates, but these investments were not made until 2014, by which time the programme had established its credentials (Butcher, 2014).<sup>40</sup> This seems to be the cause of the apparent anomaly in the chart below (where pre-2014 accelerators seem to have attracted more corporate funding than those founded in 2014 or 2015).

Corporates set up or invest in accelerators for a variety of reasons including (Mocker, Bielli, and Haley 2015):

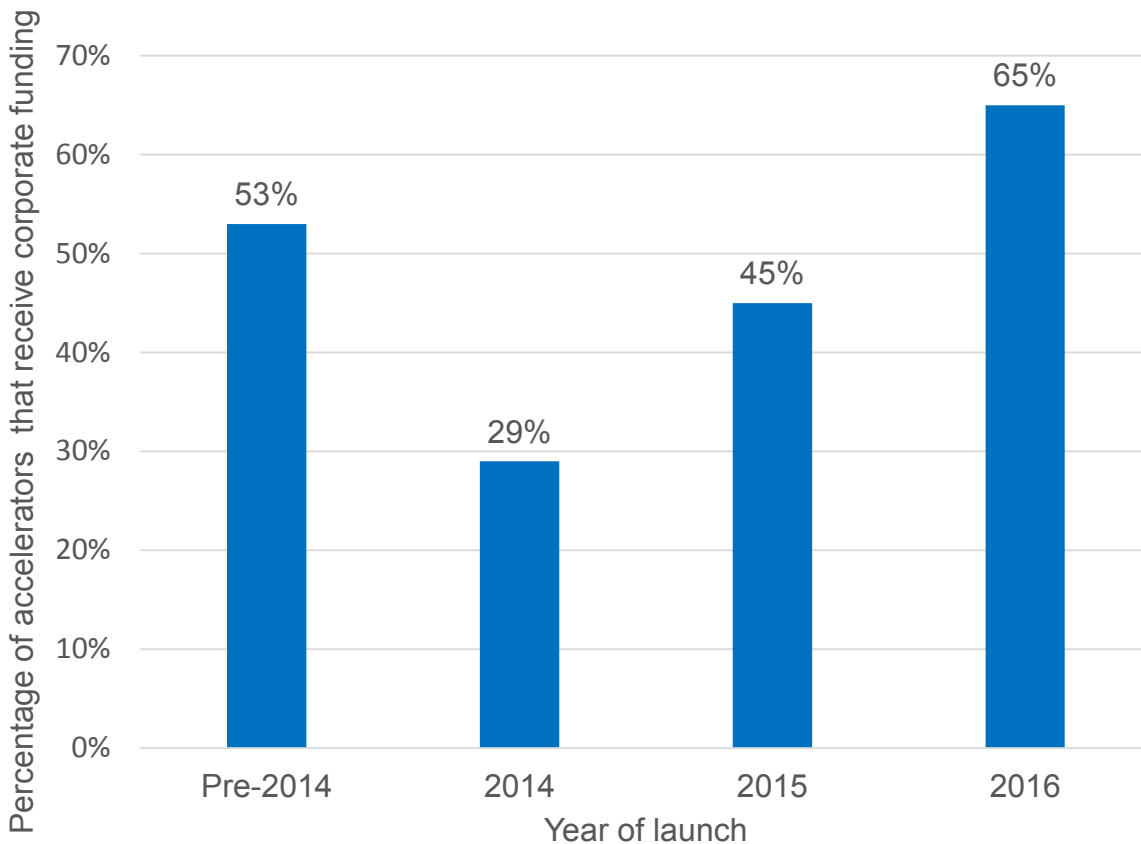
- Rejuvenating corporate culture to create an entrepreneurial mindset among employees
- Creating an innovative brand that attracts customers, business partners and future employees
- Solving business problems quicker and at lower risk
- Expanding into future markets by accessing new capabilities or channels

Corporate involvement can also benefit the participating startups by giving them access to, and potential business opportunities with, major players in their field.

---

<sup>40</sup> The investors are Scottish Publishing Company, DC Thomson and co.; Russian Internet Company, Yandex; International Law firm, Loley and Lardner LLP and British Recruitment and HR Services firm, Hays, alongside, Business Angels, VCs and Family Offices.

**Figure 22. Percentage of accelerators that launched in 2016, 2015, 2014, and pre-2014, which are corporately funded.**



Total number of accelerators that provided information on their funding source that launched in 2016 = 43; 2015 = 33; 2014 = 21 and pre-2014 = 38.

## Diversification of business incubation models

Alongside the growth of traditional incubator and accelerator models, we have also observed a diversification of business incubation models. One recent, perhaps inevitable, development is the expansion of programmes provided online. This includes the virtual accelerators and incubators described earlier in this report, as well as online entrepreneurship courses like Tech City UK's Digital Business Academy<sup>41</sup> and online advice centres such as The University of Northampton's Inspire2Enterprise. Virtual accelerators, in particular, are becoming increasingly common, from Dreamstake, the oldest active virtual accelerator, which launched in 2014, to the seven online programs running today (Figure 16). The growth of virtual incubators has been slower, with only four currently active, the oldest of which, Ignite virtual incubator and Rushlight Incubator, launched in 2006.

<sup>41</sup> [www.digitalbusinessacademyuk.com/](http://www.digitalbusinessacademyuk.com/)

Another variation of the accelerator model which is becoming more prevalent is the pre-accelerator, which is described in detail above. FFWD London launched as the first UK based pre-accelerator in 2014, since then a further nine pre-accelerators have opened their doors to entrepreneurs.

A different variant is the 'startup studio', such as Makeshift and Mint Digital. These organisations aim to generate multiple, parallel ideas in-house before spinning them out.<sup>42</sup> Since such entities do not provide support to external startups, however, they are of limited interest here.

As mentioned in the definitions section, during the data collection process, we also observed that several coworking spaces and seed / venture capital funds are beginning to provide services which are more traditionally associated with incubators and accelerators, such as mentoring or entrepreneurship training.

---

<sup>42</sup> See <http://www.nesta.org.uk/blog/startup-studios-better-model-build-startups-1>

## 5. Limitations and avenues for further research

This study of UK accelerators and incubators is, we believe, the most comprehensive to date. However, several important questions remain which were either outside the scope of the original study or which could not be answered due to lack of data.

First, while this study touches upon other forms of business incubation such as coworking spaces, VC funds, startup studios and online courses, it did not attempt to be a comprehensive survey of new business support. To understand properly the support available to UK startups, it may be worthwhile comparing with other support types, as well as mapping how the providers of such support relate to each other.

Second, the report did not attempt to compare the UK's accelerator and incubator landscape with other countries worldwide. This is currently extremely difficult due to the lack of data outside the UK, although projects such as the Global Accelerator Learning Initiative (GALI) are attempting to address this. Whilst there are several existing databases that feature accelerators worldwide (including Seed DB, OpenAxel, Startup Blink, Gust and F6S), these databases are far from complete and are currently not suitable for drawing cross-country comparisons; data on incubators is even worse than for accelerators. In addition, while Salido et al., (2013) attempted to understand the accelerator landscape at an international level, this study is now four years old which, due to the rapidly evolving nature of this field, means insights from this study are now largely out-of-date.

Third, while this study has provided some indication of the geographical areas with low numbers of incubators or accelerators, questions remain before definitive policy recommendations can be made. In particular, our analysis of catchment areas was based on a small sample, which could be verified by expanding to a greater number of organisations. Better understanding of how far entrepreneurs were able to commute, and how willing they were to relocate, would be useful. As would closer examination of travel times by road and public transport, which would help us understand which areas of the country are outside a reasonable travel time for business support.

Fourth, with regard to sectoral coverage, we suggest that further work may be needed to examine whether specific sectors may be in need of extra support. Although we identified some sectors which may appear to lack incubators or accelerators, it is not immediately clear either that startups play the same role in each sector.

Fifth, further research is needed concerning funding of accelerators and incubators. In this study, we asked incubators and accelerators to report categories of funder, but additional research to identify the volume from these sources would be valuable. Specifically, we suggest that additional work is needed to understand the role of public funding of incubators and accelerators in more depth, as well as the potential impact of the removal of ERDF funding following Brexit.

Sixth, this report did not attempt to evaluate the effectiveness or cost-effectiveness of incubators or accelerators, physical or virtual. While there is growing evidence that accelerators do indeed have a positive impact on startup growth (e.g. Roberts et al., 2016) as well as the likelihood of exit and survival rates, studies are typically hindered by the lack of a suitable control group which takes into account the selectivity and signalling effect of accelerators. This makes it difficult to ascertain the value truly added by incubators or accelerators. Furthermore, because many accelerators have only been created in the last few years, data is unavailable concerning the long-term impact of many programmes. It is therefore difficult to assess questions such as whether public-funding of accelerators is an efficient use of public money; how this type of support compares with other potential options; and what is the economic impact of attracting overseas firms to participate in UK programmes.

Seventh, and closely related to the above, more research is needed to understand what interventions add the greatest value for which types of startup. For instance, recent studies have found evidence of value being added through building social capital (e.g. building connections, credibility), structured accountability (e.g. mentors holding founders to their plans) (Gonzalez-Uribe and Leatherbee 2016), peer learning (e.g. collaboration and competition with cohort), and through mentor & director expertise (Hallen et al., 2016).<sup>43</sup> It also seems important that programmes are not too intensive but allow time for startups to put learnings into practice. Nevertheless, a great many questions remain, such as the importance of providing direct funding, the value of co-locating startups in the same building, and what makes good mentorship. Some of these gaps in evidence are being addressed by current research projects, but many of these studies will take 2-3 years to conclude.<sup>44</sup>

Finally, it would be very interesting to understand the extent to which accelerators and incubators can actively stimulate the supply of new firms, rather than simply serving existing demand. There is some initial evidence (e.g. Fedher and Hochberg, 2014) that accelerators, at least, have a stimulant effect on their local ecosystem, leading to more deals and greater investment, even among non-accelerated firms - though the mechanisms are unclear. Better understanding of this stimulant effect would help in answering questions such as whether there is a maximum density of programmes, whether places like London have reached a point of saturation for accelerators, whether additional public support would be beneficial in certain areas, and whether there is an accelerator 'bubble'.

---

<sup>43</sup> Positive effects were only found in the best accelerators.

<sup>44</sup> See, for instance, the Innovation Growth Lab: [www.innovationgrowthlab.org/our-projects](http://www.innovationgrowthlab.org/our-projects)



## 6. Discussion and conclusions

This study identified 205 incubators and 163 accelerators active in the UK, supporting an estimated 3,450 and 3,660 new businesses a year respectively, with UK accelerators providing an estimated £33m annually in startup investment.<sup>45</sup> It shows that the support commonly offered by incubators and accelerators differs in several ways - including business model, source of funding, catchment area and services delivered. It demonstrates that incubators tend to be more local in focus than accelerators, and questions the received view that accelerators are precursors to incubators; rather, the evidence suggests that both types of organisation are addressing startups at similar stages but which have slightly different needs.

While incubators are predominantly funded by the fees or rent they charge residents, accelerators are most often funded by corporates. Furthermore, this trend for corporate funded accelerators appears to be growing very rapidly. A significant number of incubators and accelerators receive public or university funding - although accelerators are, as a whole, less dependent than incubators on these sources.

Public funding appears to be more significant in some geographies and sectors than others. It was found that business incubation in the Agritech, Transport and Space and Satellite sectors, and in North East of England, Wales and the West Midlands is reliant on public and university funding. It is important to note that the objectives of publicly funded incubators and accelerators are likely to differ from those of corporately funded programmes: for example, while public funding typically comes with the goal of local economic development, corporate funding is often aimed at tackling a specific problem, or building an ecosystem around a core technology (Miller and Bound, 2011).

The majority of accelerators and incubators either have no sectoral focus or a non-specific focus on digital technology. While incubators also often focused on science-based businesses, such as Life Sciences, Health and Wellbeing, Energy and the Environment, or Space and Satellite technology, accelerators less commonly focus on these sectors. Accelerators tend to focus on new trends in digital technology, such as Fintech, Smart-cities and Edtech, which can be developed relatively quickly and have the potential to scale. The short duration of accelerator programmes also allows them to be more reactive to such trends.

In terms of sectoral coverage, we found no relationship between a sector's GVA contribution or new business formation rate and the number of incubators or accelerators catering to that sector. It is important to note that this analysis does not take into account the relative innovation intensity of different sectors, nor other substantial differences.

---

<sup>45</sup> We caution against combining these numbers, because some businesses which participate in an accelerator will go on to join an incubator (or vice versa). We are also aware of some startups which participate in multiple accelerators programmes, which could potentially introduce some double-counting, although we do not think that this affects the estimate materially.

Therefore further research would be required to determine whether there are any actual unmet needs in particular sectors.

In terms of geography, we found that more than half of the UK's accelerators are currently based in London, but that the trend is for new accelerators to be created in other parts of the country. Scotland, Wales and Northern Ireland fare better than most other UK regions when considering both incubators and accelerators per 1000 new businesses. While accelerators are concentrated in the capital, incubators are spread relatively evenly throughout the UK. In fact, when standardised by new business formation rate, London actually lags behind all other UK regions. In our view, this reflects two factors: first, that incubators' primary offer is the provision of physical space, which is much more expensive in London than the rest of the country (CBRE, 2016); second, that official business birth rates in London are slightly anomalous for various reasons, including the presence of numerous financial vehicles which would not meet our definition of startups.

Local Enterprise Partnerships do not exist in Scotland and Wales, so the number of incubators and accelerators was analysed at the NUTS 2 sub-regional level. It was found that while Scotland's incubators and accelerators are largely concentrated in Eastern Scotland, South Western Scotland has a higher business birth rate than Eastern Scotland, but only contains 13% of Scotland's incubators and 36% of its accelerators. In addition, this study found twice as many incubators and accelerators in the West of Wales as the East, but the business birth rate in the East of Wales is only around 25% lower than the West.

While this is, to the best of our knowledge, the most comprehensive study of UK accelerators and incubators to date, several important questions remain and we have thus highlighted several avenues for further research which we believe would be valuable, including: exploring the availability of other forms of business support such as coworking spaces, VC funds, and business development courses; investigating how far entrepreneurs are able and willing to travel to access business support; studying how important a role startups play in different sectors; and analysing the cost-effectiveness of different business incubation models and interventions. We hope that this study will stimulate further research in these areas. The dataset from which these findings were made can be downloaded from the BEIS website and we encourage others to interrogate the data further.

## 7. References

- Aerts K., Matthyssens, P., & Vandenbempt, K. 2007. Critical Role and Screening Practices of European Business Incubators. *Technovation*, 27: 254-267
- BEIS. 2016a. "Boosting Our Regional Innovation – Second Wave of the Science and Innovation Audits Now Open." GOV.UK. [www.gov.uk/government/news/boosting-our-regional-innovation-second-wave-of-the-science-and-innovation-audits-now-open](http://www.gov.uk/government/news/boosting-our-regional-innovation-second-wave-of-the-science-and-innovation-audits-now-open).  
 2016b. "Science and Innovation Audits: Wave 1 - Summary Report." Department of Business, Energy and Industrial Strategy. [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/565261/science-innovation-audits-wave-1-summary-report.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/565261/science-innovation-audits-wave-1-summary-report.pdf).
- Butcher, Mike. 2014. "Seedcamp's 3rd Fund Hits First Close Of \$28M To Scale Startups Globally." TechCrunch. July 15. <http://social.techcrunch.com/2014/07/15/seedcamps-3rd-fund-hits-first-close-of-28m-to-scale-startups-globally/>.
- CB Insights. 2017. "Digital Health Funding Sees Record Year In 2016." CB Insights Blog. [www.cbinsights.com/blog/digital-health-startup-funding](http://www.cbinsights.com/blog/digital-health-startup-funding).
- CBRE. 2016. "Global Prime Office Occupancy Costs." CBRE Research. <https://researchgateway.cbre.com/Layouts/GKCSearch/DownloadHelper.ashx>.
- Christiansen, Jed. 2014. "Startups' View: What Do Founders Get from Attending an Accelerator Programme?" Accelerator Assembly. [http://files.basekit.com/live229668\\_euacceleratorsassembly-startups-bestpracticesusecasesstudy.pdf](http://files.basekit.com/live229668_euacceleratorsassembly-startups-bestpracticesusecasesstudy.pdf).
- Dee, N., D. Gill, C. Weinberg, and S. McTavish. 2015. Startup Support Programmes: What's the Difference? Nesta. [www.nesta.org.uk/sites/default/files/whats\\_the\\_diff\\_wv.pdf](http://www.nesta.org.uk/sites/default/files/whats_the_diff_wv.pdf).
- Dee, Nicola, David Gill, Finbarr Livesey, and Tim Minshall. 2011. "Incubation for Growth: A Review of the Impact of Business Incubation on New Ventures with High Growth Potential." Nesta. [www.nesta.org.uk/publications/incubation-growth](http://www.nesta.org.uk/publications/incubation-growth).
- Dempwolf, S. C., J. Auer, and M. D'Ippolito. 2014. "Innovation Accelerator S: Defining Characteristics Among Startup Assistance Organizations." Small Business Association, Office of Advocacy. [www.sba.gov/sites/default/files/rs425-Innovation-Accelerators-Report-FINAL.pdf](http://www.sba.gov/sites/default/files/rs425-Innovation-Accelerators-Report-FINAL.pdf).
- Fehder, Daniel C., and Yael V. Hochberg. 2014. "Accelerators and the Regional Supply of Venture Capital Investment," September. doi:10.2139/ssrn.2518668.
- Gale, W. G. and Brown, S. 2013. Small Business, Innovation, and Tax Policy: A Review. doi:10.2139/ssrn.2467620.

Gonzalez-Uribe, Juanita, and Michael Leatherbee. 2014. "Business Accelerators: Evidence from Start-up Chile." Available at SSRN. [www.lse.ac.uk/fmg/events/SUP-Gonzalez-Uribe-Leatherbee-13032015.pdf](http://www.lse.ac.uk/fmg/events/SUP-Gonzalez-Uribe-Leatherbee-13032015.pdf).

GUST. 2015. "Global Accelerator Report 2015 by Gust." Gust.com. <http://gust.com/global-accelerator-report-2015/>.

Hallen, Benjamin L., Christopher B. Bingham, and Susan Cohen. 2014. "Do Accelerators Accelerate? A Study of Venture Accelerators as a Path to Success?" *Academy of Management Proceedings* 2014 (1). doi:10.5465/AMBPP.2014.185.

IPO. 2014. "Eight Great Technologies - A Summary of the Series of Patent Landscape Reports." UK Intellectual Property Office. [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/360986/Eight\\_Great\\_Technologies.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/360986/Eight_Great_Technologies.pdf).

Miller, Paul, and Kirsten Bound. 2011. "The Startup Factories: The Rise of Accelerator Programmes to Support New Technology Ventures." Nesta.

Miller, P., and J. Stacey. 2014. "Good Incubation: The Craft of Supporting New Social Ventures." London: Nesta. NESTA. [www.nesta.org.uk/publications/startup-factories](http://www.nesta.org.uk/publications/startup-factories).

Mocker, Valerie, Simona Bielli, and Christopher Haley. 2015. "Winning Together: A Guide To Successful Corporate –Startup Collaborations." Nesta. [www.nesta.org.uk/sites/default/files/winning\\_together-june-2015.pdf](http://www.nesta.org.uk/sites/default/files/winning_together-june-2015.pdf).

Nowak J.M. and C.E. Grantham. 2000. The Virtual Incubator: managing human capital in the software industry. *Research Policy*, 29: 125-134.

OECD. 2016. "OECD Science, Technology and Innovation Outlook 2016: 10 Key Technology Trends for the Future." OECD. [www.oecd.org/sti/STIO%2010%20key%20technology%20trends%20for%20the%20future.pdf](http://www.oecd.org/sti/STIO%2010%20key%20technology%20trends%20for%20the%20future.pdf).

Roberts P, Lall S, Baird RB, Eastman E, Davidson A, Jacobson A. 2016. What's Working in Startup Acceleration: Insights from Fifteen Village Capital Programs. GALI. [www.galidata.org/publications/whats-working-in-startup-acceleration/](http://www.galidata.org/publications/whats-working-in-startup-acceleration/).

Salido, E., M. Sabás, and P. Freixas. 2013. "The Accelerator and Incubator Ecosystem in Europe." Telefónica Europe.

Smith, S. W., and T. J. Hannigan. 2015. "Swinging for the Fences: How Do Top Accelerators Impact the Trajectories of New Ventures." [http://druid8.sit.aau.dk/druid/acc\\_papers/5ntuo6s1r5dvrpf032x24x5on5lq.pdf](http://druid8.sit.aau.dk/druid/acc_papers/5ntuo6s1r5dvrpf032x24x5on5lq.pdf).

Stokes, K., H. Stewart, and A. Sleight. 2015. "Top Findings from the Open Dataset of UK Makerspaces | Nesta." Nesta. [www.nesta.org.uk/blog/top-findings-open-dataset-uk-makerspaces](http://www.nesta.org.uk/blog/top-findings-open-dataset-uk-makerspaces).

Telefonica, O2. 2014. "The Rise of the UK Accelerator and Incubator Ecosystem."  
[http://cdn.news.o2.co.uk.s3.amazonaws.com/wp-content/uploads/2014/12/O2\\_WAYRA\\_Report\\_121214.pdf](http://cdn.news.o2.co.uk.s3.amazonaws.com/wp-content/uploads/2014/12/O2_WAYRA_Report_121214.pdf).

UKBI. 2013. "Overview of the UK Business Incubation Landscape." UKBI.

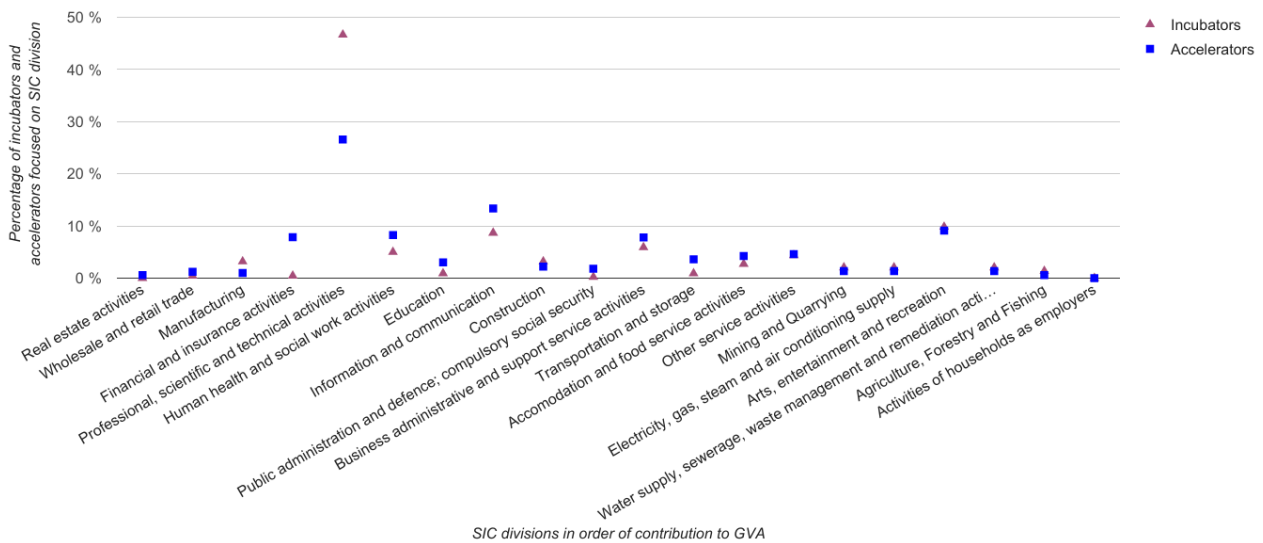
Van Hove, Jonas, Bart Clarysse, and Mike Wright. 2015. "A Look inside Accelerators."  
Nesta. [www.nesta.org.uk/sites/default/files/a\\_look\\_inside\\_accelerators.pdf](http://www.nesta.org.uk/sites/default/files/a_look_inside_accelerators.pdf).

Yu, Sandy. 2016. "How Do Accelerators Impact the Performance of High-Technology Ventures?," August. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2503510](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2503510).

# 8. Appendix

## Supplementary Tables and Figures

**Figure A1. Percentage of incubators and accelerators focused on each Standard Industrial Classification (SIC) division, in order of Gross Value Added (GVA) contribution of SIC divisions.**



Total number of incubators that provided information on their sectoral focus = 205 and total number of accelerators that provided information on their sectoral focus = 163. The horizontal axis shows SIC code divisions in order of their contribution to GVA. The SIC division 'Activities of extraterritorial organisations and bodies' was not included in this table as data on its GVA contribution is not available.

**Table A1. Distribution of incubators by Local Enterprise Partnerships.**

<b>Local Enterprise Partnership</b>	<b>Number of incubators</b>	<b>Percentage of total incubators</b>	<b>Number of incubators per 1000 new businesses</b>
Oxfordshire	13	7.47	4.66
Cornwall and Isles of Scilly	6	3.45	3.5
Worcestershire	5	2.87	2.15
Swindon and Wiltshire	5	2.87	1.86
Cheshire and Warrington	7	4.02	1.72
Derby, Derbyshire, Nottingham and Nottinghamshire	9	5.17	1.37
Coventry and Warwickshire	5	2.87	1.37
West of England	6	3.45	1.33
Leicester and Leicestershire	5	2.87	1.28
Solent	7	4.02	1.22
Liverpool City Region	5	2.87	1.15
Greater Birmingham and Solihull	8	4.6	1.14
Greater Cambridge & Greater Peterborough	6	3.45	1.09
North East	5	2.87	0.97
Hertfordshire	6	3.45	0.95
Greater Lincolnshire	3	1.72	0.81
New Anglia	4	2.3	0.77
Leeds City Region	7	4.02	0.69
Sheffield City Region	3	1.72	0.62
Greater Manchester	6	3.45	0.57
Stoke-on-Trent and Staffordshire	2	1.15	0.56
Heart of the South West	3	1.72	0.56
London Enterprise Panel	29	16.67	0.47
Enterprise M3	4	2.3	0.44
Thames Valley Berkshire	2	1.15	0.4

Local Enterprise Partnership	Number of incubators	Percentage of total incubators	Number of incubators per 1000 new businesses
Northamptonshire	1	0.57	0.35
Buckinghamshire Thames Valley	1	0.57	0.34
Dorset	1	0.57	0.34
Humber	1	0.57	0.34
Black Country	1	0.57	0.3
South East Midlands	2	1.15	0.27
York, North Yorkshire and East Riding	1	0.57	0.24
South East	4	2.3	0.24
Lancashire	1	0.57	0.2
Coast to Capital	0	0	0
Cumbria	0	0	0
Gloucestershire	0	0	0
Tees Valley	0	0	0
The Marches	0	0	0

Number of incubators, percentage of total incubators and number of incubators per 1000 businesses in each Local Enterprise Partnership

**Table A2. Distribution of accelerators by Local Enterprise Partnerships.**

Local Enterprise Partnership	Number of accelerators	Percentage of total accelerators	Number of accelerators per 1000 new businesses
Greater Birmingham and Solihull	10	6.21	1.43
London Enterprise Panel	81	50.31	1.32
Tees Valley	2	1.24	1.03
Sheffield City Region	4	2.48	0.83
North East	4	2.48	0.78
Derby, Derbyshire, Nottingham and Nottinghamshire	5	3.11	0.76
Greater Cambridge & Greater Peterborough	4	2.48	0.73
Oxfordshire	2	1.24	0.72



<b>Local Enterprise Partnership</b>	<b>Number of accelerators</b>	<b>Percentage of total accelerators</b>	<b>Number of accelerators per 1000 new businesses</b>
West of England	3	1.86	0.67
Greater Manchester	7	4.35	0.66
Leicester and Leicestershire	2	1.24	0.51
Liverpool City Region	2	1.24	0.46
Coast to Capital	4	2.48	0.43
Worcestershire	1	0.62	0.43
Gloucestershire	1	0.62	0.4
Leeds City Region	4	2.48	0.4
Heart of the South West	2	1.24	0.37
Northamptonshire	1	0.62	0.35
Dorset	1	0.62	0.34
Cheshire and Warrington	1	0.62	0.25
Solent	1	0.62	0.17
South East Midlands	1	0.62	0.14
Enterprise M3	1	0.62	0.11
South East	1	0.62	0.06
Black Country	0	0	0
Buckinghamshire Thames Valley	0	0	0
Cornwall and Isles of Scilly	0	0	0
Coventry and Warwickshire	0	0	0
Cumbria	0	0	0
Greater Lincolnshire	0	0	0
Hertfordshire	0	0	0
Humber	0	0	0
Lancashire	0	0	0
New Anglia	0	0	0
Stoke-on-Trent and Staffordshire	0	0	0
Swindon and Wiltshire	0	0	0
Thames Valley Berkshire	0	0	0
The Marches	0	0	0

Local Enterprise Partnership	Number of accelerators	Percentage of total accelerators	Number of accelerators per 1000 new businesses
York, North Yorkshire and East Riding	0	0	0

Number of accelerators, percentage of total accelerators and number of accelerators per 1000 new businesses in each Local Enterprise Partnership.

**Table A3. Distribution of incubators by NUTS 2 regions.**

Region (NUTS 2)	Number of incubators	Percentage of total incubators	Number of incubators per 1000 new businesses
<b>WALES</b>			
West Wales and The Valleys	4	2.45	0.62
East Wales	2	1.23	0.41
<b>SCOTLAND</b>			
Eastern Scotland	19	11.66	2.3
North Eastern Scotland	3	1.84	1.18
Highlands and Islands	1	0.61	0.54
South Western Scotland	3	1.84	0.35

Number of incubators, percentage of total incubators and number of incubators per 1000 new businesses in each NUTS 2 region of the UK. The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the economic territory of the EU for statistical purposes; NUTS 2 refers to basic regions for the application of regional policies.

**Table A4. Distribution of accelerators by NUTS 2 regions.**

Region (NUTS 2)	Number of accelerators	Percentage of total accelerators	Number of accelerators per 1000 new businesses
<b>WALES</b>			
West Wales and The Valleys	2	1.24	0.31
East Wales	1	0.62	0.2
<b>SCOTLAND</b>			
Eastern Scotland	6	3.73	0.73
South Western Scotland	4	2.48	0.47

Region (NUTS 2)	Number of accelerators	Percentage of total accelerators	Number of accelerators per 1000 new businesses
North Eastern Scotland	1	0.62	0.39
Highlands and Islands	0	0	0

Number of accelerators, percentage of total accelerators and number of accelerators per 1000 new businesses in each NUTS 2 region of the UK. The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the economic territory of the EU for statistical purposes; NUTS 2 refers to basic regions for the application of regional policies.

**Table A5. Pre-existing literature and databases**

Title	Author	Year	Type	Summary
Seed DB	n/a	2017	Database	Seed-DB manages a global database of accelerators. Identified 12 UK-based (188 in globally)
Gust	n/a	2017	Database	Gust created a global directory of startup support (including accelerators and incubators) across 47 sectors, to be used as a tool for startups looking support. Identified 5 UK-based (120 in globally)
GF6S	n/a	2017	Database	F6S manages a global list of accelerators to be used as a tool to help startups and entrepreneurs interact with investors and startup support. Identified 70 UK-based accelerators.
Fundacity	n/a	2017	Database	Fundacity is a platform connecting entrepreneurs and investors globally. Startups can find investors and mentors. Accelerators and angel investors can evaluate and track companies.
The Accelerometer		2016	Database	The Accelerometer curated a list of prominent accelerators and incubators in the UK.
GigaOM's European accelerator map	n/a	2011	Database & Map	GigaOM's European Accelerator Map is a crowdsourced database of Europe-based organisations operating business incubation programmes. 11 UK-based programmes.

<b>Title</b>	<b>Author</b>	<b>Year</b>	<b>Type</b>	<b>Summary</b>
TechBritain	n/a	2016	Database & Map	Tech Britain is an interactive map of the UK startup ecosystem including accelerators, incubators, coworking spaces, startups and investors. Identified 22 UK-based accelerators and 32 UK-based incubators.
OpenAxel	n/a	2017	Database & Map	OpenAxel is an interactive global map used as a tool for startups to find accelerators and corporates according to the services they offer. Identified 24 UK-based accelerators
StartupBlink	n/a	2017	Database & Map	Startup Blink is an interactive global map of the startup ecosystem including accelerators, coworking spaces, startups and investors. Identified 22 UK-based accelerators.
Official List of London Business Accelerators and Incubators	n/a	2017	List	Hubble HQ provides a list of London-based incubator and accelerator programmes. Identified 45 incubators and accelerators London-based.
European Accelerator Report	Gust and Fundacity	2015	Report	The 2015 European Accelerator Report covers accelerator programmes in the EU looking into top seed accelerator, the evolution of the accelerator industry in the region, whether accelerators are for-profit or not-for-profit, sources of funding and accelerators' revenue models. Funding sources of European Accelerators: Privately funded - 55.75%, Combination of public and private funding - 26.55%, Publically funded - 13.27%, "other" funding - 4.42%. 25% of the most active accelerators in Europe (according to number of startups accelerated) were based in the UK.
The Startup Factories: The rise of accelerator programmes to support new technology ventures	Bound, K.	2011	Report	The Startup Factories' report from Nesta, critiques accelerator programmes as a method of incubating technology startups. Concluding that the technology startup ecosystem in the UK is growing in strength though the business model for an accelerator programme has yet to be proven.

<b>Title</b>	<b>Author</b>	<b>Year</b>	<b>Type</b>	<b>Summary</b>
Good Incubation	Stacey, J.	2014	Report	The 'Good Incubation' report from Nesta, charts the rise of social venture incubation (including coworking spaces, social venture academies, accelerators, social venture prizes and competitions and angel investor networks), with a focus on what can be learned by this burgeoning sector from programmes around the world.
A look inside Accelerators	Clarysse, B, Wright, M & Van Hove, J.	2015	Report	A Look Inside Accelerators' report from Nesta, describes the three emerging archetypes of accelerators: ecosystem builders, investors and matchmakers. Questioning whether accelerators created with the purpose of ecosystem building will have similar outputs as investor-led ones.
The Rise of the UK Accelerator and Incubator Ecosystem	Telefonica	2014	Report	Telefonica's report 'The Rise of the UK Accelerator and Incubator Ecosystem' discusses the positive impact participating in a formal programme can have on a startup or entrepreneur.
Startup Accelerator Programmes: A practice guide	Stacey, J & Roberts, I.	2014	Report	The 'Startup Accelerator Programmes: A Practice Guide' report from Nesta, identifies key choices and challenges to create a guide for starting an accelerator programme.
Copying Y Combinator: A framework for developing Seed Accelerator Programmes	Christiansen, J.	2009	Report	The 'Copying Y Combinator: A framework for developing Seed Accelerator Programmes' report evaluates seed accelerator programmes and offers suggestions on designing a successful accelerator programme.
The European Seed Accelerator Ecosystem	Christiansen, J.	2014	Report	The European Seed Accelerator Ecosystem' report utilises both global and European data to provide a broader understanding of accelerator activity in Europe.
Startups' view: What do founders get from attending an accelerator programme?	Christiansen, J.	2014	Report	The 'Startups' View: What do founders get from attending an accelerator programme?' report examines the journey startups take when they enter an accelerator programme and provides insights into accelerators' impact and best practice.

Title	Author	Year	Type	Summary
The Accelerator and Incubator Ecosystem in Europe	Telefonica	2013	Report	Telefonica's 'The Accelerator and Incubator Ecosystem in Europe' report maps different entrepreneurial ecosystems of 10 key European economies to develop an improved understanding of different initiatives and best practices.
Seed Accelerator Rankings Project	Hochberg, Y; Cohen, S; Fedher, D.	2016	Report & Ranking	The Seed Accelerator Rankings 2016 establishes a definition for “accelerator” as a fixed term, cohort-based program with a mentorship and education component that culminates in a public pitch event, or demo day. To be considered in the ranking, accelerators had to be US-based, with at least one graduated cohort, as at least ten alumni. Accelerators were given a platinum, gold or silver ranking.

**Table A6. Standard Industrial Classification (SIC) Divisions, corresponding sectors and GVA contribution to UK economy**

SIC Divisions	Sectors	GVA contribution to UK (£ million; 2013)
Agriculture, Forestry and Fishing	Agritech	10,734
Mining and Quarrying	Energy and the Environment	29,438
Manufacturing	Engineering and manufacturing	166,344
Electricity, gas, steam and air conditioning supply	Energy and the Environment	25,301
Water supply, sewerage, waste management and remediation activities	Energy and the Environment	17,117
Construction	Engineering and manufacturing	91,030
	Smart Cities	
Wholesale and retail trade; repair of motor vehicles and motorcycles	Commerce	166,530
Transportation and storage	Transport	67,496
Accommodation and food service activities	Food	44,047
Information and communication	Space and Satellite technology	97,351
	Telecoms	
	Smart Cities	
	B2B	
	Other Digital Technology	
	Cyber security	
Financial and insurance activities	Fintech	123,225
Real estate activities	(only Pi Labs Accelerator)	174,532

SIC Divisions	Sectors	GVA contribution to UK (£ million; 2013)
Professional, scientific and technical activities	Health and wellbeing	113,210
	Creative Industries and Design	
	B2B	
	Space and Satellite technology	
	Engineering and manufacturing	
	Energy and the Environment	
	Life Sciences	
	Other Digital Technology	
	Other Deep-tech	
Administrative and support service activities	B2B	69,932
	Other Digital Technology	
Public administration and defence; compulsory social security	Public Sector Innovation	79,261
	Cyber security	
Education	Education	98,498
Human health and social work activities	Health and wellbeing	107,737
	Social Enterprise	
Arts, entertainment and recreation	Leisure	24,334
	Creative Industries and Design	
	Other Digital Technology	



<b>SIC Divisions</b>	<b>Sectors</b>	<b>GVA contribution to UK (£ million; 2013)</b>
Other service activities	Other Digital Technology	34,357
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	/	6,440
Activities of extraterritorial organisations and bodies	/	/

SIC codes are used in classifying business establishments and other statistical units by the type of economic activity in which they are engaged, they were last revised in 2007. Where a sector used in our dataset fits into multiple SIC code divisions, we equally distributed the incubators and accelerators that focus on that sector between the multiple corresponding SIC divisions

## UK Accelerator / Incubator Directory User Guide

**(January 2021 - Directory removed as data out of date)**

The UK Accelerator and Incubator directory is publicly available for use as a tool. The directory may be filtered and searched by type, city, country, geographical coverage, sector focus, stage of startup accepted, cost to participant, direct funding, and equity taken. Based on these characteristics, comparisons may be made between business incubation providers.

An explanation of the fields in the directory is included below, as well as the description of the options / categories incubators and accelerators selected or were assigned to describe the various features of their programmes and facilities.

### Directory fields

#### Source

This column denotes the initial identification source of the incubator or accelerator. Sources included pre-existing aggregators (such as Gust, F6S and SeedDB), Synoptica's AI engine, previous research reports and HESA's Higher Education Business-Community Interaction survey (HE-BCI).

#### Type

An important aspect of the project was to develop a typology for business incubation types. This typology takes into account existing literature as well as features we identified as being shared by different organisations (see Definitions section). As a result, in the directory the term applied to each programme or facility in some cases is not in line with the term that they use to describe themselves. In creating this directory we aimed for 100% coverage of programmes which meet our definition of 'incubator' or 'accelerator' as well as their close relatives 'pre-accelerators' 'virtual accelerators' and 'virtual incubators'. While, collecting data we came across several business incubation models which possessed some of the characteristics of, but did not meet our definitions of accelerators or incubators. These models include 'Active seed / VC' funds, 'Coworking space +' and 'makerspaces'. While these further models remain part of the directory we are aware that they may not be fully comprehensive with regards to examples in the UK. Where an incubator is part of a University Enterprise Zone (UEZ), this is indicated in parentheses. University Enterprise Zones are a wider concept than that of an incubator, representing specific geographical areas where universities and business work together to increase local growth and innovation. Each UEZ will be supported by a partnership between a university, Local Enterprise Partnerships (LEPs) and others.

#### City

This field indicates the city in which the accelerator or incubator is located. Accelerators and incubators based in multiple cities will have a separate entry in the directory for each location.

**Programme name**

This field indicated the name of the business incubation programme or facility. Some programmes and facilities are under the umbrella of another organisation with a different name.

**Organisation name**

This field indicates the name of the organisation that operates the accelerator programme or incubator facility if different from the programme name.

**Address**

This field indicates the UK address of the accelerator or incubator. Incubators and accelerators with multiple addresses have a separate entry in the directory for each address.

**Country**

This field indicates the country i.e. England, Scotland, Wales or Northern Ireland in which the accelerator or incubator is located.

**Geographical coverage**

This field indicates geographical coverage which describes the size of area from which programmes or facilities recruit businesses. Geographical coverage responses were categorised as 'Regional', 'National', 'International' and 'University'. Geographical coverages denoting areas smaller than NUTS1 regions were classified as 'Regional'. 'National' refers to coverage of the entirety of the United Kingdom (England, Scotland, Wales, and Northern Ireland). 'International' refers to all coverage that extends beyond the United Kingdom into one or more other countries. 'University' in the context of geographical coverage, refers specifically to programmes aimed at current students, alumni and staff of the university at which the programme is based.

**Public contact details**

This field includes the phone number, email address and twitter handle of the programme or facility to be used by the public and those applying to the programme.

**Website URL**

This field includes the programme's website URL.

**Sector focus**

This field indicates the sector focus of businesses that are accepted to take part in programmes. The self-reported sectoral focus of programmes was assigned to one of the following categories:

'Other digital technology' covers geolocation, apps, software, hardware, IoT, gaming and virtual reality; 'Life sciences' refers to medical science, biotech, pharma, biosciences and veterinary sciences; 'Health and wellbeing' covers healthtech, digital health and medtech companies; 'Social enterprise' encompasses companies providing solutions to issues surrounding financial exclusion, criminal justice, gender and Tech4Good; 'Public sector innovation' includes companies with a focus on democracy and civic technology to improve e.g. government infrastructure and public engagement; 'Edtech' refers to education technology, e.g. e-learning, focused companies; 'Fintech' covers those serving financial and insurance technology companies; 'Smart Cities' refers to companies using ICT and IoT solutions in urban development; 'Cyber security' refers to companies building protection for computer / IT systems; 'Telecoms' refers to telecommunications companies; 'Engineering and manufacturing' encompasses robotics and marine automation; 'Transport' refers to companies with an automotive and/or rail industry focus; 'Leisure' includes travel, hospitality and sports oriented companies; 'Food' covers companies in the food and drinks sector; 'Creative industries and design' encompasses fashion, music and media companies; 'Commerce' covers retail, shopping and eCommerce solutions companies; 'B2B' programmes work to accelerate companies with commercial business solutions; 'Energy and the Environment' refers to those working with cleantech, sustainability, low carbon and ecotech companies; 'Space and satellite technology' refers to companies using satellite and space-based applications; 'Agritech' covers companies producing science and technology solutions for agriculture; 'Other Deep technology' includes chemistry, physics, nanotech and electronics based companies; finally 'No particular sectoral focus' accounts for programmes or facilities open to firms from any sector.

### **Funding sources**

This field indicates the funding sources of programmes, categorised as either: 'Corporate', 'Public', 'Revenues', 'University', 'Philanthropy', 'Venture Capital' or 'Other' (e.g. alternative funding such as crowdfunding, business angels and family offices).

### **Support offered**

Lists the support offered to businesses by programmes. Support falls into the following categories:

#### *Mentoring*

The provision of mentoring is common across accelerators and incubators. Startups and entrepreneurs are offered the opportunity to get advice and guidance from mentors (normally experienced entrepreneurs) as their business evolves.

#### *Seminars / Workshops*

Seminars and workshops provide formal teaching to participating startups in business development and growth.

### *Office / Work space*

The provision of office and workspace is a common feature of accelerators and incubators.

### *Laboratory space*

Laboratory space in some cases may accompany or substitute office / work space for business incubation targeted at businesses that require wet labs and clean rooms.

### *Funding advice*

Funding advice is offered in cases where accelerators or incubators do not offer direct funding or in cases where startups require further investment to continue to the next stage of growth.

### *Demo days*

Demo days are an opportunity for businesses in accelerators or incubators to pitch to other entrepreneurs and investors.

### *Networking connections / Access to investors*

Access to connections, including experts, customers, potential collaborators and investors, for startups / businesses can. Networking may be in the form of organised events.

### *Training*

Training provided by accelerators and incubators may encompass entrepreneurial training, as well as technical training to aid in business and product development.

### *Legal / Accountancy support*

Legal / Accountancy support from accelerators or incubators can be important to young businesses when they are focused predominantly on product and business development, it also encompasses intellectual property which is crucial when considering innovative ideas and / or products.

### *Direct Funding (e.g. grants or equity investment)*

Direct funding may be offered to businesses in incubators and accelerators at times in exchange for equity.

### *Investment readiness*

Investment readiness is a service often provided to support businesses that require further financial investment to grow.

### *Access to experts (Inc. academics)*

Access to experts or expertise refers to the opportunity to be advised by specialists in the startups sector.

### *Tech support (Inc. IT support)*

Tech support, like legal and accountancy support, provides startups with a service they may not be structured to organise themselves, in some cases it also involves support in product or service development.

### **Number of businesses supported per year**

The number in this field when referring to incubators is taken to be the capacity of the incubator at any one time. With regards to accelerators operating on a cohort basis, this number is the total number of businesses that participate in the programme over a 12 month period.<sup>46</sup>

### **Cohort size**

This field is applicable only to those conducting entrance on a cohort- or class-basis (i.e. not incubators or virtual incubators), whereby a group of companies enter the programme or facility simultaneously, for a fixed time period.

### **Stage of startup accepted**

This field indicates the stage of development of the businesses accepted into each programme or facility. The responses were assigned to the categories; 'pre-startup', 'startup', 'early-stage venture' and 'later-stage venture' as described by Dee et al. (2015). Each programme could be assigned any combination of the four categories, for example, accelerators and incubators offering support to businesses at 'All stages' will appear in the directory as supporting 'Pre-Startup, Startup, Early-stage venture, Later-stage venture'.

During the pre-startup stage, focus is predominantly on the entrepreneur/founder with emphasis on identifying the idea and the product market. Startup companies are in the process of being set up or newly-formed company and yet to sell their product commercially. Early-stage ventures require further funding for commercial manufacturing

---

<sup>46</sup> The question proved to be less easily applied to incubators than to accelerators, and thus to ensure responses were not misrepresented a sample of 10 incubators were randomly selected (using a random number generator) selected from the directory and asked the following question: Is the number given in response to the question 'How many startups have graduated in the last 12 months?': a) The number of businesses in the incubator at any one time (i.e. at capacity), or b) The number businesses exiting the incubator per year? Six of the ten incubators contacted responded. Of the six incubators that responded to the follow up question, all confirmed that the answer equated to option a), the number of businesses in the incubator at any one time.

and will not yet be generating profits. Later-stage ventures demonstrate a steady rate of growth and are more likely to be profitable than the earlier stages.

### **Other entrance criteria**

This field describes the programme / facility entrance criteria (excluding geographical location, stage of startup and sector) for startups. These criteria could be a minimum annual turnover, an ability to reside and work in the United Kingdom, age, amongst others.

### **Duration**

This field indicates the amount of time startups generally spend in an incubator or accelerator. For incubators that do not have a fixed duration or where this is based on the development of the resident company the response given was either n/a or an average duration of residence.

### **Cost to participant**

A number of programmes or facilities operate on a revenue or fees-based model, requiring startup businesses to pay to reside or participate. In this field the cost to the participant is calculated in £ per person, per month unless otherwise indicated.

### **Direct funding**

Some accelerators and incubators offer funding in the form of cash or grants, which this field indicates.

### **Equity taken**

In some cases, equity is taken (by incubators and accelerators) in participating businesses in exchange for investment (i.e. equity investment) or services, in lieu of fees, which this field indicates.

### **Programme description**

The field includes a short description of the programme or facility from the accelerator or incubator itself.

### **Year launched**

This field denotes the year each programme or facility began to accept businesses for the purpose of business incubation. This year is not necessarily the same as the year the organisation running the incubator began operating.

Primary data gathering was conducted via a Google Forms survey. Ensuring the data-gathering process was open so that individual accelerators and incubators could contribute their own details into the database. This served two purposes: (i) finding additional incubators and accelerators which were missed in the secondary data gathering phase;

and (ii) providing more complete data for those already in the database, since some information - such as numbers of companies incubated – can be difficult to obtain via public sources.

The survey and the answers (once standardised) received contributed to the development of the directory structure.

## Survey

Q1. What is the name of your organisation or facility?

Q2. What is the name of your programme, if different to above?

Q3. What is the address of your head office?

Q4. If different to the above, please list other locations where you are active.

Q5. Please provide the public contact details that potential clients / applicants can use:

- Phone number
- Email address
- URL

Q6. Which term best describes your programme?

- Pre-Accelerator
- Accelerator
- Incubator
- Other (please describe)

Q7. What sectors does your incubator / accelerator focus on?

Q8. What are your entrance criteria? (E.g. participants' location of residence, university affiliation, stage of development, minimum funds raised, gender)

Q9. How long does a company remain in your accelerator / incubator? (If you do not have a fixed term of residence, please indicate this and tell us the average length of time and what would lead a company to leave)

Q10. If your accelerator / incubator is cohort-based, how many firms were in the most recent cohort?

Q11. If different from above, how many startups have graduated in the last 12 months?



Q12. Which of the following services do you provide? (Select all that apply)

- Mentoring
- Seminars / Workshops
- Office / Work space
- Laboratory space
- Funding advice
- Demo days
- Networking connections / Access to investors
- Training
- Legal / Accountancy support
- Direct funding (e.g. grants or equity investment)
- Other (please specify)

Q13. If your accelerator / incubator offer direct funding, what is the typical amount given to each company?

Q14. If you take equity from participating companies, what is the average percent equity taken?

Q15. How is the programme funded? (Select all that apply)

- Corporate funding
- Venture Capital funding
- University Funding
- Public Funding (non-university e.g. Innovate UK, EDRF)
- Other (please specify)

Q16. What year did you first accept companies?

Q17. Do you have any additional comments? (E.g. notable alumni, details about your programme, selection process or other organisation that you work with and would like to mention)

Q18. Are there any other accelerators or incubators that you would like to mention? Please list them here.

## Response standardisation

In a number of cases, the open questions in the survey and the corresponding fields elicited a range of responses which were standardised to allow analysis.

Q7. What sectors does your incubator / accelerator focus on?

This was designed as an open question. The responses informed the sectors identified in the directory. Based on existing literature, accelerator or incubator sector focus was assigned to the broader sector category which provided the best fit, for example, 'healthtech' focus would be categorised under the broader sector of 'health and wellbeing'.

Q9. How long does a company remain in your accelerator / incubator? (If you do not have a fixed term of residence, please indicate this and tell us the average length of time and what would lead a company to leave)

This equates to "Duration" in the directory. Many programmes and facilities responded with a range, for example, 12 – 18 months. In these cases an average of the two numbers was used, in this example, 15 months or 65 weeks.

Q13. If your accelerator / incubator offer direct funding, what is the typical amount given to each company?

In the cases of direct funding, many programmes and facilities responded with a range, for example, £5,000 – £10,000. Programmes or facilities offering a range, may make a decision on the amount of funding to give on a case-by-case basis. For the purposes of analysis, an average of the two numbers is used, in this example the average would be £7,500.

Q14. If you take equity from participating companies, what is the average percent equity taken?

In the cases of equity taken responses, many programmes and facilities responded with a range, for example, equity taken: 5 – 8 %. Programmes or facilities offering a range, make a decision on the equity percentage to take on a case-by-case basis. For the purposes of analysis, an average of the two numbers is used, in this example the average would be 6.5%.

Q15. How is the programme funded? (Select all that apply)

- Corporate funding
- Venture Capital funding
- University Funding
- Public Funding (non-university e.g. Innovate UK, EDRF)
- Other (please specify)

Some accelerators and incubators in response to this question / field in the directory in addition to selecting the different categories also named specific funding sources. Where specific sources were named, they were categorised as 'Corporate', 'Public', 'Revenues', 'University', 'Philanthropy', 'Venture Capital' or 'Other' (alternative funding such as crowdfunding and business angels). The additional categories which did not initially appear in the survey question, were added as a result of the 'Other' option, information from the websites of incubators and accelerators, and reviews of existing literature.



© Crown copyright 2017

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit [nationalarchives.gov.uk/doc/open-government-licence/version/3](https://nationalarchives.gov.uk/doc/open-government-licence/version/3) or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk). Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available from:

[www.gov.uk/government/publications?keywords=&publication\\_filter\\_option=research-and-analysis&topics\[\]=all&departments\[\]=department-for-business-energy-and-industrial-strategy](https://www.gov.uk/government/publications?keywords=&publication_filter_option=research-and-analysis&topics[]=all&departments[]=department-for-business-energy-and-industrial-strategy)

Contact us if you have any enquiries about this publication, including requests for alternative formats, at: [enquiries@beis.gov.uk](mailto:enquiries@beis.gov.uk)