

Assessing demand for FinTech-specific collaboration and incubation space in Scotland for Scottish Enterprise

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Report completed/submitted by:	Susan Staiano, Richard Weaver
Proof check completed by:	Jeremy Hanks
Date:	27 <sup>th</sup> September 2018
Report reviewed by:	Pamela Reid
Date:	27 <sup>th</sup> September 2018

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## **Executive summary**

#### Overview

FinTech has been identified as a critical sector for economic growth in Scotland, the UK and internationally. In recent years, the pace of growth and change in FinTech has increased significantly, and the sector can be seen to be disrupting and reshaping Financial Services across the world. It is estimated that the FinTech sector in the UK generated circa £6.6 billion in 2015 and employed approximately 61,000 people<sup>1</sup>, whilst the average value of UK FinTech companies grew by 22% from 2014 to 2016.<sup>2</sup>

In Scotland there is estimated to be around 40 FinTech companies. Whilst the sector is still in its infancy, it has been recognised that FinTech is an area in which Scotland can have a competitive advantage due to its strengths in Financial Services, and existing ecosystem of FinTech SMEs, Financial Services incumbents, universities and business support organisations. FinTech Scotland was established with support from the Scotlish Government in order to drive forward the sector in Scotland and achieve a ranking as one of the top five international FinTech centres by 2020.

In order to support the development of Scottish FinTech, ekosgen was commissioned by Scottish Enterprise to assess demand for a FinTech specific physical collaboration and incubation space. The aim of the research was to develop recommendations regarding the provision of space, for industry to consider.

The work for this commission included desk research and consultation with FinTech SMEs, Financial Services incumbents, stakeholders and existing business support providers in order to explore current provision of space and business support and identify any gaps. The research was informed by three potential models for future delivery, as a starting point for investigation:

- **Franchise Model**: The allocation of space within existing incubators or accelerators for the delivery of FinTech Scotland collaborative services and activities.
- **Partner Model**: Hosting FinTech Scotland collaborative services within premises owned by FinTech Scotland partner organisations (e.g. businesses or universities).
- **Strategic Model**: The creation of a new, dedicated 'standalone' co-location space for explicit use by FinTech Scotland and FinTech ecosystem partners, offering hub services.

## Identifying space and support requirements

As Scotland's FinTech sector develops, there are clear findings in terms of the space and support requirements for helping to grow the sector:

 There is already significant provision of incubation space that is suitable for FinTech start-ups in Scotland. This space is designed to meet the needs of the wider Digital Technology sector, as well as other sectors, rather than being FinTech-specific. However, there is a consensus that FinTech companies do not need incubation space that is tailored to their needs.

<sup>&</sup>lt;sup>2</sup> HM Treasury (2018) FinTech Sector Strategy



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<sup>&</sup>lt;sup>1</sup> Scottish Enterprise (2017) The FinTech Opportunity for Scotland: Opportunity and Planning Document

- Rather than office space, the key challenges for the sector include the articulation of Scotland's
  FinTech USP, the co-ordination of the ecosystem and the targeting of support. There is a need
  for Scotland to identify a particular area of strength/specialism in order that Scottish FinTech
  can be marketed on the global stage. This will also be important for directing and tailoring
  support packages.
- There is a need for more joined-up thinking on setting the strategic direction for the FinTech sector in Scotland. There should be clarity on the roles and engagement modes of different actors, otherwise there is a risk that a lack of co-ordination will lead to a duplication of efforts, or preclude the involvement of key players.
- SE and strategic partners need to better understand the particular support needs of the FinTech sector. This will be informed by company life stage, and also an informed judgement of those sub-sectors or vertical strands of FinTech that have the best growth potential.
- Particular areas of business support identified as challenging include support for growth stage
  companies. The majority of Scotland's FinTech companies are at this stage so a focus on
  growth and acceleration is needed to drive the sector forward. This requires more tailored
  FinTech-specific support around issues including regulation, business to business selling,
  introductions and relationship building with customers and investors and internationalisation.
- Though incubation space for start-ups, and office space for scale-up and growth companies is sufficient, there is an identified need and demand for a more strategic space and aligned support aimed at fostering collaboration between FinTech SMEs.
- In particular, there is a desire for a more open, neutral space where existing companies, including Financial Services incumbents are more visible. Such an environment also provides opportunities for FinTech SMEs and Financial Services incumbents to collaborate together and build more effective and equal relationships, and acts as a gateway for investors.

## Providing the necessary space and support

Based on the key challenges identified, the report makes a number of conclusions on the type of support, and importantly space, required by the sector.

- There is a need to direct support and focus towards growth stage companies, whilst maintaining the existing offer for start-ups. A key part of this will be offering a tailored support package, based on the specific needs and customer/sales base of the FinTech sector.
- Though there is no need for office or incubator space, there is a need for dedicated collaboration space, as described above, and an accelerator programme. Whilst there are developments around FinTech accelerator programmes through universities, these are aimed at only a small number of FinTech companies and tend to be targeted at the pre-trading stage. An accelerator programme can be an important mechanism for providing mentorship and the tailored business support requirements through a more formal setting.
- This space requirement should take the form of a strategic hub, which can act as a focal point
  or anchor for the sector, offering collaboration space for projects involving multiple FinTech
  SMEs and also between FinTech SMEs and Financial Services incumbents, and also a space
  through which to deliver acceleration programmes.
- This strategic space can also serve as a location in which FinTech Scotland can be rooted, and increase its visibility both to the sector, but also to external audiences.



- The preferred option should be to establish the strategic hub in a dedicated facility. This would best provide the space required to establish a strategic anchor for the sector.
- Cost and time barriers preclude the building of a new facility. Instead, strategic partners should seek to make use of existing commercial premises, or possibly available partner space. This is a middle-ground or hybrid approach that could be expanded geographically or thematically through other delivery models if necessary.
- Other considerations for the hub, include its geographic position. Whilst Edinburgh would appear to be the most advantageous location, it may also be important to offer access to businesses based elsewhere through presence delivered via through a partner on a franchise or co-location basis.
- In terms of targeting, whilst the space should be aimed at FinTech SMEs, it may be beneficial to include related sectors such as Cybersecurity.
- In terms of revenue generation, whilst there will be no rent as there will be no office space, paid membership of the hub for strategic partners or incumbent Financial Services companies who wish to take up the option of space in the hub may be a potential solution.



## 1 Introduction

#### **Overview**

- 1.1 ekosgen was commissioned in June 2018 to undertake a demand and needs assessment for physical collaboration and incubation space for the Scottish Financial Technology (FinTech) sector. The aim was to explore current provision for collaboration space within Scotland that could be used by eligible FinTech businesses, identifying any gaps in provision in terms of suitability for Scotland's FinTech business base.
- 1.2 The research then explored the demand for space and support by the FinTech sector, and the appetite for, and practicalities of, delivering FinTech-specific collaboration and incubation space with existing suppliers. Key to the work was assessing what approach would best fit the need in Scotland.
- 1.3 The research was informed by three potential models for future delivery, as a starting point for investigation:
  - **Franchise Model**: The allocation of space within existing incubators or accelerators for the delivery of FinTech Scotland collaborative services and activities. The FinTech Scotland franchise may be operated by the existing facility provider.
  - Partner Model: Hosting FinTech Scotland collaborative services within premises owned by FinTech Scotland partner organisations (e.g. businesses or universities). Organisations may not necessarily be a current FinTech Scotland partner. FinTech Scotland services may be operated by a third-party supplier (not necessarily the host partner).
  - Strategic Model: The creation of a new, dedicated 'standalone' co-location space for explicit
    use by FinTech Scotland and FinTech ecosystem partners. Hub services would likely be
    operated by a third-party supplier.
- 1.4 Throughout the research, these models, and alternatives such as a 'virtual' FinTech hub underpinned by a range of digital and online collaboration tools, were tested with stakeholders, suppliers and FinTech companies.

## A burgeoning sector for Scotland

#### FinTech as a disruptor

1.5 FinTech companies are businesses that develop and deploy new technology to create new and enhanced financial services for consumers and businesses. It includes companies that operate across the breadth of financial and business services. In the Scottish context, FinTech can be defined as follows:

"The consideration, application or provision of support to new or repurposed technology that creates efficiency, reduces costs, manages risk or generates new insights to organisations working within, or supporting, the Financial Services industry. This also includes the crossover of pre-existing technologies prevalent in other industries into



financial services organisations and applies to all types of organisations from start-up through to established firms."<sup>3</sup>

- 1.6 SMEs innovating in FinTech are not operating in a vacuum, rather they are operating anywhere that Financial Services customer facing or back office are being transformed to benefit consumers and businesses.
- 1.7 FinTech has been around as long as the Financial Services industry itself, but in the last decade, FinTech has been disrupting and reshaping the financial world and the pace of change is unprecedented. It is recognised as a critical sector for future growth in Scotland and the wider UK. Capturing the exact scale of the FinTech sector is challenging, and it is a fluid sector. However, estimates suggest that the UK FinTech sector generated circa £6.6 billion in 2015 and employed approximately 61,000 people. In total, it was estimated that \$5.4 billion of the \$46.7 billion of venture capital invested in the global FinTech sector in 2015 was invested in the UK.<sup>4</sup> Demonstrating the growth potential, it is estimated that the average revenue of British FinTech companies grew by 22% from 2014 to 2016.<sup>5</sup> By comparison, turnover in the Scottish economy decreased slightly over the same period.<sup>6</sup> There is estimated to be around 40 FinTech start-ups and established companies in Scotland.
- 1.8 FinTech is a disruptor in terms of the wider Financial and Business services sector. New innovative and agile companies are now operating in the same market space as established Financial Services companies, including banks, insurers, and wealth and asset management companies. Customers of FinTech are individuals as well as employers in the public, private and voluntary sectors. FinTech helps organisations manage the financial aspects of their business and has led to new ways of working and, in some cases, new business models.
- 1.9 Though there is clear competition between FinTech companies and incumbent financial service companies, there are also signs that the disrupted are now becoming disrupters. For example, the Clydesdale and Yorkshire Bank Group has established its own banking innovation lab, Studio B<sup>7</sup> and RBS's FinTech hub aims to grow FinTech businesses and develop the FinTech capability of larger enterprises.<sup>8</sup>
- 1.10 The industry is more focused than ever on technological innovation, for example as a result of the opportunities presented by the shift to open banking, to achieve efficiencies, improve service delivery and meet customer expectations. New start-up companies are competing with, as well as adding value to, traditional banking and financial institutions. They are disrupting the market by providing products and services previously only available through traditional financial institutions. From blockchain technology to mobile payments and robo-advisors, our relationship and interactions with money are changing. FinTech companies recognise that in today's digital age, people expect easy access, speed, convenience and efficiency at work and in their personal lives, and to be able to choose the platforms and devices to use in order to do so.

#### FinTech's development in Scotland

1.11 Scotland has a long-established Financial Services sector and a leading global reputation. It is the UK's second financial hub outside of London. The sector is made up of a strong mix of Scottish

https://www.rbs.com/rbs/news/2017/02/scotland\_s-first-fintech-hub-launched-by-royal-bank-of-scotland.html



<sup>&</sup>lt;sup>3</sup> Deloitte (2016) FinTech Scoping Review: Establishing Scotland as a FinTech centre

<sup>&</sup>lt;sup>4</sup> Scottish Enterprise (2017) The FinTech Opportunity for Scotland: Opportunity and Planning Document

<sup>&</sup>lt;sup>5</sup> HM Treasury (2018) FinTech Sector Strategy

<sup>&</sup>lt;sup>6</sup> Scottish Government (2018) Scottish Annual Business Survey 2016

<sup>&</sup>lt;sup>7</sup> https://www.youandb.co.uk/studiob/

Financial Services companies such as Standard Life Aberdeen and Scottish Widows, and large multinational corporations such as Morgan Stanley and Avaloq.

- 1.12 Scotland, and Edinburgh in particular, has proven to be a supportive and nurturing environment for FinTech companies. There is a skilled workforce, proximity to a mature Financial Services sector, universities specialising in FinTech, and a strong Digital Technologies sector. Scotland's business support environment is well developed and responsive to industry needs although there is currently no FinTech specific physical collaboration or incubation space provision.
- 1.13 Demonstrating this, JPMorgan's Technology Centre is based in Glasgow and is one of the company's two strategic technology hubs in Europe. Barclays Bank has recently announced a large scale investment to create up to 2,500 new jobs at a tech hub campus in Buchanan Wharf, in Glasgow City Centre on the bank of the River Clyde. This will double the number of Barclays jobs in Scotland, with existing operations set to transfer to the new campus from 2021. Glasgow was selected because of the available skills and talent, along with a supportive business development environment.
- 1.14 It is clear that Scotland has the combination of a number of large well-established firms, innovative and adaptable start-ups, academic research, a strong education and skills pipeline, private investors and a supportive ecosystem, including strong and progressive current policy all of which provides a supportive environment for growing the sector. There are however recognised challenges in taking the sector to the next level in terms of encouraging more viable start-ups and supporting the scaling up of existing companies with high growth potential with the appropriate advice and support.
- 1.15 The establishment of the FinTech Strategic Initiative, driven by the FinTech Steering Group Committee and FinTech Scotland is a response to this and aims to drive the further development of the FinTech ecosystem.
- 1.16 The FinTech Strategic Initiative established by Scottish Financial Enterprise (SFE), Scottish Enterprise and partners seeks to develop the Scottish FinTech sector and improve understanding of how FinTech can contribute to the wider Financial Services sector. Its work is delivered across four work streams: Global awareness, Securing talent, Infrastructure and Finance.<sup>9</sup>
- 1.17 FinTech Scotland established by the Scottish Government in collaboration with the private sector and the University of Edinburgh has £250,000 of combined investment from Scottish Enterprise and Scottish Government. It aims to strengthen Scotland's position in the global FinTech ecosystem, and through this, ensure that Scotland is recognised as a top five (Deloitte ranked) global FinTech centre by 2020. It has six key deliverables:
  - Enabling: Delivering FinTech initiatives through strategic leadership and partnerships
  - Connected: Facilitating an integrated and innovative FinTech ecosystem
  - Innovative: Supporting innovative and entrepreneurial FinTech enterprises
  - Expertise: Encouraging development of FinTech skills as well as diversity and inclusion
  - Visible: Developing FinTech community engagement, inclusion and collaboration
  - Global: Building international FinTech engagement and collaboration<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> FinTech Scotland (2018) FinTech Scotland Strategic Plan for 2018-2020



<sup>&</sup>lt;sup>9</sup> http://www.sfe.org.uk/about/groups-initiatives/fintech-strategic-initiative/

- 1.18 Scotland's offer is critical here. The country is perceived as having the requisite talent, visibility and has a reputation as an attractive place to live. 11 The country's strength and tradition in Financial Services is also a major factor, and incumbent actors in the sector offer FinTech companies relatively easy access to a global marketplace.
- 1.19 The UK Government's FinTech Sector Strategy outlines plans for the sector's future development. It includes promotion of the UK FinTech sector on the global stage, through the formation of "bridges" with countries such as Singapore, China (including Hong Kong) and Australia more recently, to encourage and enable realisation of trading opportunities. Other actions have included establishing FinTech envoys, and giving the Financial Conduct Authority (FCA) a strong competition objective. The latter is to support emerging FinTech companies with meeting regulation compliance, which is often expensive and time consuming, in order that they can expand and compete with incumbents. As a result, the FCA has established an innovation hub and regulatory sandbox to support FinTech firms, and is investing around £395 million in FinTech firms and challenger banks through British Business Bank programmes.<sup>12</sup>
- 1.20 The UK's Industrial Strategy offers significant opportunities for FinTech through its Artificial Intelligence and data economy grand challenge.<sup>13</sup> Aligned to this, the UK Government has established an Industrial Challenge Fund for investment in science and business innovation within key development areas. There are funding opportunities for the FinTech sector, particularly in the Next-generation services challenge area, around the use of artificial intelligence and data analytics to make the UK service sector more efficient, productive and competitive. This is highly relevant to the work of FinTech companies to improve and develop the Financial Services sector and the challenge area offers up to £20 million of funding to businesses and researchers.<sup>14</sup>
- 1.21 More recently, the Department for International Trade has established a FinTech Steering Board, designed to attract inward investment for FinTech.<sup>15</sup>

#### Investing in, and supporting FinTech in Scotland

- 1.22 FinTech in Scotland has attracted significant levels of investment in the last decade. It is widely recognised by both the Scottish Government and the wider Digital Technology and Financial Services sectors as a significant opportunity with a valuable contribution to make to the ambitions of Scotland's Economic Strategy<sup>16</sup> across its priorities of internationalisation, innovation, investment and inclusive growth.
- 1.23 There has been support and investment in incubation facilities for companies in general, however, as mentioned before no dedicated hub or space to allow FinTech companies to come together to collaborate and/or access support. Though there is some appetite for cluster development in Scotland, there is currently no clear picture on demand or need for dedicated physical space to help incubate and accelerate FinTech business growth, and create an environment to support business collaboration, between FinTech SMEs and between FinTech companies and established financial service companies. An evidence base is therefore required to provide direction on the future support required to maximise the potential of FinTech in Scotland. It should demonstrate:

<sup>16</sup> http://www.gov.scot/Publications/2015/03/5984



<sup>&</sup>lt;sup>11</sup> https://www.insider.co.uk/news/turing-fest-brian-corcoran-tech-13027502

<sup>&</sup>lt;sup>12</sup> HM Treasury (2018) FinTech Sector Strategy

<sup>&</sup>lt;sup>13</sup> HM Government (2017) Industrial Strategy: Building a Britain Fit for the Future

<sup>&</sup>lt;sup>14</sup> https://www.gov.uk/government/collections/industrial-strategy-challenge-fund-joint-research-and-innovation#next-generation-services

<sup>15</sup> https://www.finextra.com/pressarticle/74344/dit-announces-uk-fintech-steering-board

- The type of space required, or if dedicated space is required at all; and
- If so, at what stage in the growth/life cycle is the space targeted at.

#### **Drivers of change and opportunities**

- 1.24 The key driver of change for FinTech and Financial Services more broadly has been the pace of change in financial industry through the adoption of digital technology solutions and use of data driven innovation. Digital technology and solutions are more prevalent than ever and are leading to changes in the way businesses operate, particularly in Financial Services. It is also raising consumer expectations.
- 1.25 The prevalence of IT and digital technology in the economy and wider society is increasing rapidly and the pace of change is not expected to slow. In fact, according to a recent survey of more than 3,100 IT and business executives, 86% anticipate that the pace of technology change will increase rapidly or at an unprecedented rate in their industry over the next three years.<sup>17</sup>
- 1.26 The adoption of digital services is driving the way Financial Service businesses are having to operate. Take-up of digital services (e.g. through e-commerce, use of banking apps, etc.) is much greater than for any previous significant technological change in the sector for example, telephone banking. The level of consumer demand for digital solutions is significantly greater than even three years ago, in part driven by millennials' preference for digital tools and interaction for services such as banking. Many people now prefer to use online sites and apps, with 70% of UK consumers now using financial apps to keep control of their money. This is a steep increase from 2016 when less than 40% used these apps. This is not only changing the way that banks and other Financial Services organisations serve their customers, it is changing how they operate for example banks are increasingly acting as technology providers.
- 1.27 Activities in London are recognised as a key driver for Scotland's FinTech ecosystem. London is a leading global hub for Financial Services and FinTech hubs and has a significant effect on Scotland's ecosystem, sometimes positively and sometimes it presents challenges, acting as a barrier to development in Scotland given the London-centric focus of some parts of the sector. Nevertheless, proximity to London offers a number of opportunities, not least acting as a more affordable base for Financial Services operators with easy access to The City.
- 1.28 Research in to the Scottish FinTech sector by Deloitte in 2016 identified that the key building blocks are in place but there is a need to develop some areas, and for the FinTech community to be more joined up. Achieving this will require a better connected ecosystem with better links between innovative start-ups and established Financial Services organisations as well as better links between academia and industry. It concluded that a fundamental consideration is what the focus of the opportunity for Scotland should be defining what Scotland "is about" in terms of its FinTech ecosystem and strengths, and what the next steps are to maximise the opportunity presented.

## **Approach**

1.29 The first task of this research was to undertake focused desk research, mapping out current provision of and delivery models for incubation and collaboration space in Scotland as well as examples of provision elsewhere in the UK and overseas. This was supplemented by consultations with a number of key informants across the FinTech ecosystem in Scotland. Following this, a series of interviews were

<sup>18</sup> http://mobilemarketingmagazine.com/uk-consumers-financial-apps-open-banking-yolt



<sup>&</sup>lt;sup>17</sup> Accenture (2016) Digital Economic Value Index

held with a mix of FinTech SMEs and incumbent Financial Services companies operating in the FinTech sphere in Scotland, 17 in total. Details can be found at **Appendix 1**.

1.30 The final task was to test the delivery feasibility of dedicated FinTech space, and what form this would likely need to take - i.e. one of the models informing the research, or an alternative model identified through the research. This included a high-level appraisal of options, and identification of potential next steps.

### Report structure

- 1.31 The report is structured as follows:
  - Chapter 2 provides an overview of the FinTech landscape in Scotland and the physical support infrastructure available to the Scottish FinTech ecosystem;
  - Chapter 3 presents the challenges faced by FinTech companies and discusses their support needs; and
  - Chapter 4 sets out conclusions with respect to support needs and potential solutions including the provision of space, and areas for further consideration.
- 1.32 The following appendices are also provided:
  - Appendix 1 sets out the list of key informants, FinTech companies and potential suppliers consulted with;
  - Appendix 2 details the available physical and support infrastructure in Scotland; and
  - Appendix 3 provides detail on FinTech support infrastructure worldwide.



## 2 The FinTech landscape

#### **Headline messages**

- Financial Services is a critical sector for economic growth in Scotland, employing nearly 86,000 people and contributing £8.5 billion in GVA.
- Across the UK and Scotland, a number of strategies and initiatives have been put in place to support the sector, including the formation of FinTech Scotland as an industry body.
- There are currently around 40 FinTech specific companies operating in Scotland and there is strong potential for growth. Open banking has been identified as an area of strength.
- There are 68 business support facilities/programmes operating in Scotland identified by this
  research and 17 of these are well positioned to support FinTech businesses.
- Of these 17:
  - o There is a concentration of incubators and a cluster in Edinburgh.
  - o There is limited provision for growth stage companies.
  - o Only one facility is aimed specifically at the FinTech sector.
- Outside Scotland, there are good examples of support facilities/programmes providing innovative services and tailored support to develop internationalisation and relationships between FinTech start-ups and Financial Services incumbents.

### Introduction

2.1 This chapter provides an overview of the FinTech landscape as it relates to Scotland. It explores the current provision of physical facilities and support programme for the FinTech sector in Scotland, and provides an overview of some key FinTech support facilities and programmes outside of Scotland and the lessons that Scotland can draw on.

#### FinTech in Scotland

- 2.2 There are currently around 40 companies in Scotland that are purely focused on FinTech. They tend to be small- or medium-sized enterprises (SMEs), and the majority are very 'young', having been founded in the last few years. There are also a number of larger banks working in FinTech in Scotland including JP Morgan, which has a software development hub in Glasgow. The hub employs over 1,250 staff working in Digital Technology roles such as cloud computing and big data.
- 2.3 Much of the focus on FinTech in Scotland has been on the existing Financial Services sector and the potential it offers to FinTech companies. This is a key strength as Scotland is an important centre for Financial Services and has a skilled Financial Services workforce. In total, the sector employs nearly 86,000 people and contributes around 7% Scotland's total GVA, equating to approximately £8.5 billion.<sup>19</sup>

<sup>&</sup>lt;sup>19</sup> FinTech Scotland (2018) FinTech Scotland Strategic Plan for 2018-2020



- 2.4 There are also substantial and growing strengths in Scotland within Digital Technology. It is estimated that are approximately 75,000 people<sup>20</sup> working in Digital technology in the country, and ekosgen's mapping of the sector found that across the whole economy there are over 90,000 people working in Digital Technology roles. Particularly strong, and growing, concentrations exist within subsectors including Computer consultancy activities and Computer programming activities.<sup>21</sup>
- 2.5 Major success stories in Scottish FinTech include:
  - Nucleus Financial, which won Investment Platform of the year in 2016 and serves over 85,000 customers;
  - Money Dashboard, which won Best Personal Finance App 2017 at the British Banking Awards;
  - ZoneFox, an Edinburgh Napier University cybersecurity spinout, which recently secured £3.6 million Series A funding to support its future development; and
  - FreeAgent, which was the first equity crowdfunded business to achieve IPO, achieving a market capitalisation of £34.1 million.<sup>22</sup>
- 2.6 In terms of the subsector profile of Scottish FinTech, the company base is strongest in software and there are also companies based within payments, cybersecurity and platforms. There is less activity in robotics and virtual reality subsectors.<sup>23</sup> Consultees in the research identified open banking as a growing area of strength in Scotland, and one in which we could potentially specialise. Figure 2.1 map the subsectors of companies operating in the Scottish FinTech space. It illustrates the particular concentrations in payment products and services and products aimed directly at customers, such as savings apps. There are also smaller clusters within security and regulation and platforms.

Figure 2.1: Subsector mapping of FinTech companies in Scotland



Scotland's Fintech Enterprises Leading on Data Driven Innovation

Source: FinTech Scotland (2018)

<sup>&</sup>lt;sup>23</sup> Scottish Enterprise (2017) The FinTech Opportunity for Scotland: Opportunity and Planning Document



<sup>&</sup>lt;sup>20</sup> Scottish Enterprise (2017) The FinTech Opportunity for Scotland: Opportunity and Planning Document

<sup>&</sup>lt;sup>21</sup> Ekosgen (2017) Scotland's Digital Technologies Sector

<sup>&</sup>lt;sup>22</sup> Deloitte (2017) Connecting Global FinTech: Interim Hub Review 2017

- 2.7 As well as acting as an opportunity for clustering of expertise and large banking organisations, the size of the Financial Services sector in Scotland means that it is imperative that FinTech develops, as if there is not a strong emergence of FinTech in Scotland, then there is a risk of losing Financial Services companies and jobs. With the FinTech sector's potential to disrupt existing Financial Services, it is likely that many of the operations and activities currently being undertaken in Scotland in large banks will move to disruptive FinTech companies and clusters elsewhere in the world.<sup>24</sup> In a 'do nothing' scenario, it is estimated that Scotland could lose up to 14,000 jobs by failing to develop a strong FinTech sector.<sup>25</sup> However, recent research indicates that with appropriate support, there is potential to create an additional 15,000 jobs in the sector by 2027. These jobs could generate additional salaries of £1.1 billion from which further indirect and induced impacts would flow.<sup>26</sup>
- 2.8 Deloitte's 2016 FinTech scoping review identified widespread recognition of the possibilities for FinTech in Scotland, with many business and actors across the Scottish FinTech eco-system, describing themselves as being 'as bullish' or 'more bullish' about the sector's potential than the general market sentiment.<sup>27</sup> Much of this positivity is based around Scotland's existing strength in Financial Services. This positivity is validated as Edinburgh was listed as a developing new FinTech hub in Deloitte's Connecting Global FinTech: Interim Hub Review 2017 report.<sup>28</sup> Whilst the report does not provide a ranking, Edinburgh's inclusion amongst 24 emerging FinTech hubs globally reflects very positively on the cluster's development.
- 2.9 There are a number of specific sub-sector and cross-sector opportunities in Scottish FinTech for example Cybersecurity. Cybersecurity is particularly prominent following high-profile cyber-attacks on organisations such as TalkTalk and the NHS, prompting the development of more sophisticated security and response systems. Other areas where there is potential for development include data analytics there are no Scottish FinTech firms currently providing dedicate Financial Services analytics products or services and blockchain, which is currently in early stages in Scotland but is projected to be an important area of development over the period to 2021. Emerging technologies such as robotics and cognitive computing also have significant growth potential.<sup>29</sup> Data driven innovation is also a key part of the Edinburgh City Region Deal, with £60 million of investment being used to support a Data Driven Innovation Programme. This includes an initiative led by the University of Edinburgh and Heriot-Watt University to train 100,000 Scots in data skills over the next ten years. <sup>30</sup>
- 2.10 Attracting start-ups to Scotland from London is an opportunity, particularly at the scaling-up stage. At that point, companies must decide where to locate new parts of their operation and London can be expensive. If Scotland has a clear proposition and develops its 'prospectus', it could be more effective at attracting FinTech companies looking to grow. This will of course be competitive as there are more established FinTech clusters, including Dublin, Berlin and Copenhagen. However, with the right policy and pitch, Scotland could successfully attract London based FinTech businesses which would boost our profile as a FinTech cluster, in turn making it more attractive and therefore easier to attract further inward investment.<sup>31</sup>

<sup>&</sup>lt;sup>31</sup> Scottish Enterprise (2017) The FinTech Opportunity for Scotland: Opportunity and Planning Document



<sup>&</sup>lt;sup>24</sup> Scottish Enterprise (2017) The FinTech Opportunity for Scotland: Opportunity and Planning Document

<sup>&</sup>lt;sup>25</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> Deloitte (2016) FinTech Scoping Review: Establishing Scotland as a FinTech Centre

<sup>&</sup>lt;sup>28</sup> Deloitte (2017) Connecting Global FinTech: Interim Hub Review 2017

<sup>&</sup>lt;sup>29</sup> Deloitte (2016) FinTech Scoping Review: Establishing Scotland as a FinTech Centre

<sup>30</sup> https://news.gov.scot/news/edinburgh-and-south-east-city-region-deal

## Existing physical and support infrastructure in Scotland

- 2.11 As demonstrated in Chapter 1, there is currently extremely limited specific FinTech support space in Scotland. However, there are 17 business support programmes/facilities that are suitable for FinTech companies, (as set out in Appendix 2). These comprise incubators, accelerators, accelerator programmes (which do not offer physical space, but may be associated with accelerators) and coworking space. Examples include Codebase<sup>32</sup>, SeedHaus<sup>33</sup> and Elevator<sup>34</sup>.
- 2.12 There are 68 facilities offering incubation, acceleration/business growth and collaboration space for start-up and growth businesses in Scotland. The mapping and analysis identified 17 programmes/spaces across Scotland that offer provision most suited to FinTechs. Programmes/facilities were identified as offering provision suitable for FinTech companies on the basis of prior work with FinTechs or having a focus in relevant areas such as Digital technology or Finance. As shown at Table 2.1, of the 17 facilities, seven (41%) are incubators. Accelerator, Co-working space and accelerator programme each account for three facilities. One of the facilities DataLab is an innovation centre, with a focus on driving collaborative data based research projects between the public sector, industry and academia.

Table 2.1: FinTech suitable facilities/programmes by support type

Support type	No. of programmes/ facilities	%
Incubator	7	41%
Accelerator	3	18%
Accelerator programme	3	18%
Co-working space	3	18%
Innovation centre	1	6%
Total	17	100%

Source: ekosgen mapping analysis (2018)

- 2.13 As shown at Table 2.2, the 17 facilities identified in the mapping have varying levels of focus on and fit with FinTech. Just one Royal Bank of Scotland's FinTech Hub is exclusively focused on FinTech. Of the remaining 16, 12 facilities have a more general technology focus, facilities well-suited to FinTech include CodeBase (which has three centres) and Up Accelerator, which runs an acceleration programme in Edinburgh for Technology companies working in the Health, Media and Finance sectors. The remaining four, such as Elevator accelerator, have no specific sectoral focus but have worked with or are interested in working with FinTech companies.
- 2.14 Medicity, based near Glasgow, is an important example of an incubator with a specific focus on a type of technology. Sitting alongside BioCity, a Life Science incubator, Medicity offers incubation space to start-ups, SMEs and international businesses looking to launch in the UK. It is focused on businesses developing technological solutions within healthcare. As well as incubation space, Medicity also offers accelerator programmes and boot camps and aims to offer a space where academics, industry and potential clients can come together.<sup>35</sup>

Table 2.2: FinTech suitable facilities/programmes by area of focus

Focus/specialism	No. of programmes/ facilities	%
Digital technology	12	71%

<sup>32</sup> http://www.thisiscodebase.com/

<sup>35</sup> https://www.linkedin.com/pulse/could-medtech-innovation-bridge-between-east-west-andrew-mcgee/



<sup>33</sup> https://thisisseedhaus.com/

<sup>34</sup> https://www.elevatoruk.com/

Focus/specialism	No. of programmes/ facilities	%
General	4	24%
FinTech specific	1	6%
Total	17	100%

Source: ekosgen mapping analysis (2018)

- 2.15 Start-up support suitable for FinTech companies in Scotland is a strength. Incubator space (and to a lesser extent co-working space), tends to be focused on early stage businesses, and of the 17 facilities identified in Scotland, seven are incubators and three are co-working spaces. Although the only FinTech specific provision is through the RBS hub.
- 2.16 Whilst the start-up support is a strength, there is much less support in the form of physical space available to growth stage companies to help them scale-up. It is worth noting that there is a wide range of support available through SE's account management product portfolio, and also via Business Gateway. However, whilst acceleration programmes/facilities tend to be focused on growth stage businesses, a number of the FinTech suitable accelerators/accelerator programmes in Scotland are aimed at start-ups. For example, SeedHaus, a pre-seed accelerator in Edinburgh is based around investment and mentorship of Tech start-up companies. In total, only seven out of the 17 facilities offer provision for growth stage companies: CivTech, CodeBase, Elevator, Pathfinder, TechX, Tontine and Up accelerator. The reasons there appears to be less FinTech support for growth stage companies may include the additional costs and space associated with supporting more established businesses; the need for more sector-specific expertise and specialist support required; and the fact that there is a focus on encouraging more start-ups that can survive to the trading stage to grow the scale and critical mass of the sector.
- 2.17 A number of the FinTech suitable facilities/programmes are based in universities and restrict provision entirely or principally, to students, staff and alumni. This includes the Edinburgh Business School Incubator at Heriot-Watt University Business School, Robert Gordon University Digital Incubator, and Edinburgh Innovations at the University of Edinburgh (though it does provide facilitation of collaborative work between outside companies and the university).
- 2.18 Table 2.3 shows the breakdown of the 17 FinTech suitable facilities/programmes by geography. As some of the facilities/programmes have multiple bases, there is a total of 23 locations. It illustrates that there is a particular concentration in Edinburgh, where almost half (44%) of all facilities/programmes are located. Overall the distribution of provision broadly reflects the size of the FinTech business base in each area. In the case of Edinburgh, the city has a cluster of activity around a strong Financial Services sector and key academic institutions, such as the University of Edinburgh Informatics department. However, based on our observations it could be argued that Glasgow is under-represented, relative to the size of its FinTech and wider Financial Services sector, as it is home to just three facilities/programmes in comparison to Edinburgh's ten. The geographic distribution of different support types also varies and start-up incubators are particularly concentrated within the Central Belt. Of the seven FinTech suited incubators just two are based outside of the Central Belt, and one of these is only open to students at Robert Gordon University.



Table 2.3: FinTech suitable facilities/programmes by geography

Area	No. of programmes/ facilities	%
Edinburgh	10	44%
Aberdeen	4	18%
Dundee	3	13%
Glasgow	3	13%
Inverness	1	4%
Perth	1	4%
Stirling	1	4%
Total	23	100%

Source: ekosgen mapping analysis (2018)

- 2.19 The mapping table provided at Appendix 2 includes two newly planned facilities the Wayra accelerator and Strathclyde hub. The Wayra accelerator is a collaboration between the University of Edinburgh and the Wayra group, and will offer acceleration to blockchain and artificial intelligence start-ups and spinouts. Blockchain is a key growth area with significant potential. Other new developments include a hub at the University of Strathclyde, which will add to provision in Glasgow. It will be delivered as part of the Technology Innovation Centre Phase 2 and will draw on a range of existing innovation and start-up programmes offered by Strathclyde including its Business School Growth Accelerator programme, to support pre- and post-start-up FinTech companies. A particular focus will be enterprises started or spun out by university students.
- 2.20 A new CodeBase facility will open in Aberdeen in early 2019, which will help to enhance provision in the North East. Similarly, Elevator in Aberdeen are on schedule to open a second incubator facility next month. TechX will occupy space in both facilities expanding their provision to start-ups and existing technology companies serving the Oil and Gas sector.

## FinTech support infrastructure worldwide

- 2.21 This section provides an overview of the desk research and consultations carried out with support providers in the rest of the UK and internationally is based on the mapping set out at Appendix 3. It provides an overview of the types of support spaces and services offered. In particular considers where there are examples that Scotland could learn from.
- 2.22 Examples of innovative international FinTech support include the Boston FinTech Sandbox and The Floor, which has bases in Tel Aviv and Hong Kong. The FinTech Sandbox is not a physical space, it is a support programme that provides free data to start-up FinTechs so that they can develop and test their innovations; participants can access data from wherever they are based geographically. Access to this sort of data can be prohibitively expensive for small companies and so is a barrier frequently faced by start-ups who need to test and prove the feasibility of their product.<sup>37</sup>
- 2.23 The Floor is open to large international Financial Services and FinTech start-up/disruptor companies. The Financial Services organisations identify key challenges, and these challenges are matched with FinTech start-up/disruptor companies who develop solutions using The Floor's innovation labs.<sup>38</sup> Since opening in June 2016 companies using The Floor have developed technologies that are being used by international banks such as Intesa Sanpaolo.<sup>39</sup>

<sup>&</sup>lt;sup>39</sup> http://www.world.intesasanpaolo.com/israeli-fintech-powers-innovation/



<sup>36</sup> https://www.ed.ac.uk/informatics/news-events/stories/2018/wayra-university-edinburgh-launch-ai-blockchain

<sup>37</sup> https://fintechsandbox.org/

<sup>38</sup> https://thefloorhub.com/

- 2.24 Other facilities also bring together emerging FinTech companies with incumbent large Financial Services organisations and investors. The Level39 FinTech incubator<sup>40</sup> is based in Canary Wharf in the City of London. It offers mentorship, a collaborative community and networking events and provides desk space. Its location means that tenants are in a prime position, at the heart of London's Financial Services industry which can help with collaboration, identifying opportunities, recruiting talent and meeting new customers.<sup>41</sup> A number of successful FinTech companies have emerged from Level39, including Revolut a banking app which offers customers a personal money cloud, allowing them to exchange currency at interbank rates, send money through social networks and spend with a multicurrency card<sup>42</sup>. The company was recently valued at \$1.7bn.<sup>43</sup>
- 2.25 B-Hive, an accelerator programme based in Brussels, also brings together emerging FinTechs with Financial Services incumbents through its strategic programmes to develop solutions in key challenge areas. B-Hive's five key challenge areas are:
  - Cybersecurity;
  - Identity management;
  - API set-up and standardisation;
  - · Digitisation; and
  - Digital skills gap
- 2.26 B-Hive also focuses on internationalisation with hubs in London, Tel Aviv and New York to promote European FinTech. Through these hubs, FinTech members gain access to this wider international network to promote their products and services.<sup>44</sup> Copenhagen FinTech Labs takes a similar approach to internationalisation. Whilst in most senses it operates as a traditional incubator, through its international network of hubs it offers tenants the opportunity to work abroad, at the Innovation Centre Denmark, in Silicon Valley (USA) and the Rainmaking Loft in London. It also provides international networking opportunities through the Rainmaking Startupbootcamp network and its Nordic network of FinTech hubs in Oslo, Helsinki and Stockholm.<sup>45</sup>
- 2.27 MaRS, based in Toronto, is an accelerator with programmes aimed at businesses across Canada at various stages start-up, growth stage and scale-up within the Energy & Environment, Health, Finance & Commerce and Work & Learning sectors. Within the growth and scale-up programmes there is a focus on exports and access to networks of customers, investors and partners. It is the only comparator example specifically offering support to growth stage companies. MaRS' offer is based around tailored programmes of support, based on company's need. Companies on the scale-up programme get priority access to office space but can choose to remain in an existing location. <sup>46</sup> Examples of FinTech successes emerging from MaRS include Coinsquare, which has grown from a start-up in 2014 to one of Canada's biggest digital currency exchanges and is now planning to enter the Japanese market.<sup>47</sup>

<sup>47</sup> https://news.bitcoin.com/canadian-cryptocurrency-exchange-coinsquare-launch-japan/



<sup>&</sup>lt;sup>40</sup> Level39 is open to all Tech businesses but given its location within the heart of London's Finance district, has a particular concentration of FinTech start-ups.

<sup>41</sup> https://www.level39.co/

<sup>42</sup> https://www.level39.co/members/revolut/

 $<sup>^{43} \, \</sup>underline{\text{http://uk.businessinsider.com/revolut-ceo-nikolay-storonsky-hard-work-long-hours-led-to-billion-valuation-3-years-2018-4}$ 

<sup>44</sup> https://b-hive.eu/about-us

<sup>45</sup> http://fintechlab.dk/

<sup>46</sup> https://www.marsdd.com/

- 2.28 DogPatch Labs, a start-up Tech incubator in Dublin, opened in 2011 on an invite only basis, changing to a new policy in 2015 whereby companies could rent space on a paid basis.<sup>48</sup> It has now expanded, taking up three floors, and is home to 45 start-ups along with a hub for Digital Technology activity and events. It works with partners, such as Google and UlsterBank to offer members services, events and access to global networks. DogPatch Labs is situated in Ireland's Digital Technology and Financial Services centre, the European headquarters of Google, Facebook and Air BnB are within walking distance, as is the International Financial Services Centre. Many of Ireland's largest Tech companies have emerged from DogPatch Labs, with Profitero being a key example for FinTech.<sup>49</sup> Starting out at DogPatch Labs in 2011, Profitero provides an e-commerce data analytics platform to consumer brands and retailers. It is a major global company with six global offices, covering fifty countries and monitoring over 8,000 websites.<sup>50</sup>
- 2.29 The research included two co-working spaces WeWork<sup>51</sup> and Accelerate Places that focus on design-led, city centre office space. WeWork has become a global brand for co-working space with offices across North America, South America, Europe, Asia and Australia. It is renowned for creating dynamic workspaces and a collaborative community for companies across a range of sectors, stages and sizes. Accelerate Places<sup>52</sup> provides co-working spaces in London, Manchester and Nottingham. Similar to WeWork, its focus is on building communities for start-up and growth stage businesses across a range of sectors. Again, it aims to provide city-centre offices that offer a high quality environment and technology.
- 2.30 There are a number of lessons for Scotland, although it is important to remember that Scotland has an existing ecosystem and environment and therefore lessons should be drawn on and adapted to the Scotlish context rather than simply replicated.
- 2.31 Key services that are not currently provided in Scotland include the provision of free data such as in the Boston FinTech Sandbox. Access to this kind of data is a vital issue for FinTech start-ups. There are also examples of how best to engage with large Financial Services companies; this will be an important consideration for FinTech in Scotland as the strength of incumbent Financial Services businesses is a key strength. Examples from the mapping include models from The Floor and B-Hive which have taken an approach based around solution development to key challenges for the Financial Services industry. This approach has already been adopted by Up Accelerator in Edinburgh. Lab and collaboration space is needed and is accessed either by using space provided the company issuing the challenge or renting space at commercial rates for the 90-day challenge programme. DogPatch Labs and Level39 also offer interesting examples, the DogPatch Labs partnership offers services and networks to tenants, whilst for both Level39 and DogPatch Labs there is an emphasis on being based within a wider Finance/Technology district, though not within one particular Financial Services company. This is important for offering access to a wide network of potential investors and customers. Both are also very much private sector-funded: Level39 is supported by Canary Wharf Group, and DogPatch Labs was established by Polaris Partners; though it is now run by an Irish entrepreneur with support from the owners of the CHQ building where it is based, Polaris remain in an advisory role.
- 2.32 The learning about internationalisation is also useful for Scotland. A pillar of Scotland's Economic Strategy is internationalisation, but most Scottish FinTech companies are not yet at the export stage. Models include providing hubs across the world to promote FinTech from a particular country or

<sup>52</sup> https://www.accelerateplaces.com/



<sup>48</sup> https://www.siliconrepublic.com/start-ups/dublins-dogpatch-labs-achieves-60-40-irish-international-start-up-mix

<sup>49</sup> https://dogpatchlabs.com/about/

<sup>&</sup>lt;sup>50</sup> https://www.profitero.com/

<sup>&</sup>lt;sup>51</sup> <u>https://www.wework.com/</u>

continent; working as part of an international network of hubs that can use each other's resources; and the formation of global networks of customers and institutions that members can access.

2.33 As Scottish provision has tended to be concentrated within the start-up stage, it may also be useful to consider MaRS' development of a series of acceleration programmes, tailored to businesses at different stages. Whilst the emphasis from WeWork and Accelerate Places is on design-led spaces within city centres this should also be considered in the formation of any new space. The need for well-designed space with access to high quality technology and in a city centre location was also emphasised within consultations.



## 3 Challenges and support needs

#### **Headline messages**

- Scotland's USP regarding FinTech should be better articulated through focusing on particular trends or specialisms. This will allow support to also be focused on the FinTech segments with the most growth potential.
- There is a need for all actors within the sphere e.g. FinTech SMEs, Financial Services companies and support organisations to be more co-ordinated in their activity and for partners to have a more detailed understanding of the needs of the sector.
- Through a more detailed understanding of the FinTech sector and focus on an area with particular growth potential, better packages of support can be developed.
- Evidence from the consultees showed that companies are looking for a physical space that can
  offer support, collaboration and knowledge exchange rather than office space. This would also
  offer a useful meeting space for FinTech SMEs and companies from other sectors, including
  Financial Services.
- Business support needs in FinTech are similar to those of other growth sectors, including
  issues around regulation, internationalisation and business to business selling. Support through
  industry mentors is particularly popular.
- However, at the growth stage there is a need for more sector specific support including tailored knowledge of its markets and customers.

#### Introduction

- 3.1 This chapter sets out the current challenges and support needs of Scotland's FinTech sector based on consultations with companies, stakeholders, and suppliers of space and business support to the sector. The feedback resonates with the findings contained in the 2016 Deloitte study, though there is evidence to suggest that the sector has continued to develop since that report was published.
- 3.2 Tables 3.1 to 3.3 provide a profile of the SME FinTech companies consulted with (excluding the six large Financial Services companies). As shown at Table 3.1, the majority (73%) of companies have their Scottish HQ in Edinburgh, two are based in Glasgow and one is based in Aberdeen.

Table 3.1: FinTech company consultees by location

Location (HQ in Scotland)	Number	%
Edinburgh	8	73%
Glasgow	2	18%
Aberdeen	1	9%
Total	11	100%

Source: ekosgen consultations (2018)

3.3 In terms of size, Table 3.2 illustrates that three of the companies are micro, employing between one and nine people, whilst four employ 50 or more. The remainder of the companies have between 10 and 30 staff. This shows a good spread of companies of different sizes and stages of development.



Table 3.2: FinTech company consultees by size

Size	Number	%
1-9 employees	3	27%
10-19 employees	1	9%
20-29 employees	2	18%
30-39 employees	1	9%
50+ employees	4	36%
Total	11	100%

Source: ekosgen consultations (2018)

3.4 As shown at Table 3.3, the most common subsector for consultees to be operating in is customer facing, which accounts for four companies. Payments and security each accounted for three companies and one company works in FinTech platforms.

Table 3.3: FinTech company consultees by subsector

Subsector	Number	%
Customer	4	36%
Payments	3	27%
Security	3	27%
Platforms	1	9%
Total	11	100%

Source: ekosgen consultations (2018)

## Key challenges

#### **Articulating Scotland's USP**

- 3.5 There is widely perceived to be a vibrant, healthy FinTech ecosystem in Scotland, as well as a broader digital technology sector. There is a perception of growing momentum, with a number of high-profile FinTech SMEs such as Money Dashboard achieving notable traction and success. However, one of the main concerns in the sector is that Scotland has yet to identify or define its niche, what is its offer? Despite the critical mass of FinTech companies, and Financial Service incumbents involved in FinTech, there is currently no specific or identified USP. There is no 'hook' for the direction of travel for future sector growth which is seen as a weakness that could inhibit growth. The nascent market in Scotland may not be enough to nurture growth in every FinTech sub-sector. Amongst consultees, there is a perception that Scotland is still trading on its strong but historic reputation for retail banking and other Financial Services such as insurance.
- 3.6 There is a need to quantify or assess trends and specialisms emerging in the Scottish context. This may be starting to happen: there is some suggestion from consultees that open banking could be a particular focus. For example, one FinTech actor is currently developing a concept for an open banking centre of excellence as part of the Edinburgh and South East Scotland City Deal. This is an area of activity in which Scotland appears to have a competitive advantage.
- 3.7 Articulating Scotland's specialist offer or area of key focus could help to leverage greater interest in, and support for, the sector in a more strategic and coherent way, thus building its profile at home and abroad. This profile was reported by the majority of consultees as being very low.
- 3.8 Defining a USP or niche for Scotland will help with marketing and creating the pitch for Scotland's FinTech sector by defining the 'offer'. There is a perception that there is too much focus on a small number of success stories, and a missed opportunity to reflect other areas of strength and potential in Scotland.



#### **Defining FinTech**

- 3.9 Defining and targeting support at FinTech is a particular challenge in terms of both providing support and space. Too specific a definition could exclude some companies and start-ups and, given the rapid evolution in the sector, could root it in the 'now' rather than the future. FinTech is a key sector in its own right, but by its nature, it cuts across a number of other vertical sectors it is increasingly pervasive because of the prevalence of technology underpinning online financial transactions and other broader activity. The sector's pace of change and fluidity is part of its strength but also can make a firm definition at best, unhelpful, and at worst, obsolete and a barrier to growth.
- 3.10 From an innovation point of view, FinTech companies need exposure to as many overlapping businesses, sectors, and actors as possible not just financial services. Examples include digital health, insurance, media and legal. Consultees agreed that the term 'FinTech' may be fast becoming a misnomer and that clustering of companies combining various sub-sectors such as FinTech, MedTech, InsureTech, etc. will be critical for its development going forward.

### Strategic roles and direction

- 3.11 The research highlighted that the precise roles of FinTech Scotland, SE and other strategic partners in the strategic development of the sector must be clarified and clearly articulated. There is a consensus that commercially focussed targets should drive activity and that there should be a clear joined-up approach. Whilst some businesses and stakeholders perceive that FinTech Scotland and SE do good work to help the sector develop and grow; others are of the views that FinTech Scotland focuses too much on its 'Connected' and 'Visible' deliverables, and that SE should take a more proactive approach to delivering the right kind of support to develop and grow individual businesses. One consultee suggested that there is too much attention on SDI's activity and the internationalisation/inward investment agenda, and Scotland's home-grown talent was being neglected as a result. This could arguably be weakening the strategic direction of developing the sector at home.
- 3.12 It is clear also that the apparent appetite and activity of FinTech SMEs, Financial Services companies and other actors in the FinTech sector needs to be harnessed to the benefit of the sector, and ultimately the Scottish economy. There is a generally held perception that activity to date has lacked co-ordination, and more support is needed to join efforts up:

"There is lots of stuff going on, but is it co-ordinated?"

"There is good energy in the sector, but people need to be led."

3.13 Whilst some local authorities are keen to support FinTech companies and sector growth, they noted a need to be guided by both industry and enterprise agencies as to how best to provide this support. SE's role in supporting FinTech also needs to be more clearly defined with a majority of consultees suggesting that there isn't always clarity. They believe there should be a definitive position on the extent to which SE delivers a strategic overview, specialist support, or takes a more pro-active role in supporting the sector beyond directly supporting FinTech Scotland. This might include taking leases on property, or helping to offset financial risk. The following comment from a consultee illustrates this:

"Scottish Enterprise needs to decide what they can and can't do, [and] provide clarity on their resource commitment"

3.14 For companies, the engagement model is key. Large corporate organisations are keen to better engage with FinTech SMEs, but are not always clear how best to achieve meaningful and productive



engagement, moving from the more conventional *supplier:provider* model to working collaboratively. There is agreement that there needs for transparency in how large Financial Service organisations can best engage with SMEs, particularly in incubation, acceleration or collaboration hubs or other space.

#### **Understanding support needs**

- 3.15 The research highlighted a need for partners to have a better and more detailed understanding of the support needs across the wider FinTech sector. Undertaking detailed research with businesses about their future development needs and understanding the type/delivery model of support preferred was out with the scope of this study but requires to be undertaken in the short term. This is in the context of a dynamic and fast changing sector, driven by market forces. Strategic partners require better and timely information to agree the type of support that needs to be delivered physical space or business support and the objectives of this support.
- 3.16 Central to this is the life stage of a FinTech company, and so how, and where to focus the different types of support. This will dictate whether physical space is needed for a particular type of FinTech company (and if so, what type of space), as well as the broader support package required. The needs of established and trading FinTech companies will of course be different to those of start-up companies. The latter require more generic business advice and support, whilst the former are likely to have need of quite specialist support to support the development of their already established markets and products.
- 3.17 The current scale of the sector in Scotland poses an overall challenge in that it currently comprises a small number of players (around 40 FinTech companies) and the number of start-ups is low compared to other sectors. This has implications as there is arguably not a sufficient critical mass of companies to create a dynamic, collaborative environment but, by creating this environment it will generate more companies and more activity. A lack of viable, commercial propositions in many of the start-up/early stage companies is also an issue and has implications for the early stage support and business advice provided.
- 3.18 There should be an agreed focus in Scotland about the FinTech segments that have the most growth potential, where Scotland has a current or potential leading position, and the segments that will most effectively contribute to the national strategic objectives. This will allow economic development and skills agencies (SE, SDS) and partners to more effectively direct their support and maximise impact.
- 3.19 SE and partners will then be able to make informed decisions about which segments of the sector they can and should target support and in what way, i.e. developing a package of support (programmes, hub space or clustering promotion) for FinTech companies, which is tailored to the stage of development of the business given its size, products and markets etc. Support must also complement and enhance the provision already in place from other players, i.e. private sector suppliers, entrepreneurs and investors. Targeting scarce public sector resources where they can make the most difference is critical.
- 3.20 All of the companies consulted were of the view that the focus of future support should be concentrated on those businesses that are viable and are at the growth stage with c. 10-30 employees. This offers a better chance of growing the sector as start-ups are more likely to fail and require significantly more business development input. Resources will be better used by supporting the established FinTech sector and so more likely to provide the greatest economic development return.
- 3.21 This commission was originally tasked with identifying demand for physical accommodation and other space amongst established FinTech SMEs as they have the most potential for scaling up in the short term. Feedback from a majority of the businesses suggests that they currently do not need



different or improved physical spaces to scale up and grow their business; most of those consulted for the work reported that they are not currently looking to move and are satisfied with the premises and services they have; supporting this finding two have recently entered long term leases. However, all companies consulted agreed that a physical meeting space or hub would provide a valuable focal point for a community or cluster of companies in similar sectors. Instead of premises, other aspects of their business that require advice and guidance are of more immediate concern. This is discussed in more detail later in the chapter.

#### Facilitating collaboration and innovation

- 3.22 Most stakeholders and companies noted that while Scottish FinTech companies tend to be open and collaborative, there is not a culture of collaboration in the wider Financial Services sector in Scotland. Whilst this has arguably improved in recent years, encouraging and enabling collaboration is critical. There is a need for, in the words of one company, 'more visible buyers' and for suppliers and for their customers to engage in more collaborative projects and activities. Both are needed to develop and expand market-led product offerings and grow sales.
- 3.23 Creating an environment such as a hub or meeting spaces where FinTech SMEs can interact with companies operating in other sectors, or indeed in differing FinTech subsectors, would help to share learning on a cross-sector basis or between non-competing companies. Similarly, such an environment would allow FinTech SMEs and large Financial Services companies to better interact, and help to nurture a more sustainable, equal and organic relationship, by allowing ad-hoc collaboration and sharing of ideas through greater proximity.
- 3.24 Some large financial service companies have set aside significant resource to support FinTech and other start-ups. Whilst this is the exception rather than the norm, there is evidence of more of this type of activity. Up Accelerator's challenge model is predicated on delivering collaboration and a scaling up opportunity as part of the same package.
- 3.25 There is a strong view that much of the FinTech sector is too focused on sustainable innovations and less about disrupting current business platforms and processes. This is the result of many companies developing solutions which are bespoke to one client making it hard for a FinTech company to innovate, collaborate more widely and develop a wider range of products in order to grow its customer base. This is also detrimental to the wider economy and the Financial Services sector as it limits the number and impacts of innovations, keeps the benefits more narrowly focused on one or two companies (or customers) and makes the individual FinTech company vulnerable as it results in a narrow customer base. A more effective approach would be to bring the leading players and their R&D resource together to engage with the real world of start-ups. This would be done through a demand-led or open innovation approach, utilising challenges to identify and develop solutions through collaboration. A similar approach is employed through a number of CANDO projects that use a challenge fund to solve public sector challenges, allowing solutions to be purchased whilst SMEs retain IP. Illustrating this, there is a sense in the sector that the current 'partner model' deployed by RBS at its FinTech hub does not lend itself to fostering open collaboration, rather it creates a silo effect keeping the focus on RBS' needs rather than the wider sector/marketplace whilst limiting the reach of collaborative activity.
- 3.26 There is a perception that universities are not always focused on the FinTech sector in terms of collaboration. Rather, they tend to focus on IP generation and producing papers and other research outputs to support Research Excellence Framework (REF) assessments. This is driven by HEI performance measurement indicators.
- 3.27 One specific issue relating to collaboration is data usage and provision. There are regulatory and ethical challenges around providing access to real-world data for FinTech companies in a secure



way, rather than using synthetic data to simulate real-world challenges. This is a common problem for start-ups or early stage companies which means they struggle to move to the next stage of development as they cannot test and prove their products with real data. It is important that this barrier to enterprise development is addressed.

#### **Accommodating Financial Services incumbents**

- 3.28 It is clear from the research that incumbent Financial Services companies need to be more effectively engaged in the development of the FinTech sector in Scotland, and to facilitate productive relationships between FinTech SMEs and large corporate organisations. There has been a shift away from the 'disruptors-versus-disrupted'. However, there is still a challenge in fully engaging the big corporates, many of whom often make considerable technology investments. A number maintain a 'watching brief' the global corporate organisations with a presence in Scotland undertake their major sourcing through offices in other locations such as London or New York. Scottish offices feed intelligence back to HQ and influence ideas that are within e.g. Glasgow and the wider Scottish ecosystem, but have relatively little sway in purchasing decisions.
- 3.29 Whilst much of the focus is on providing support and space to FinTech SMEs, the support mechanisms must also work for larger corporate organisations. For the provision of collaboration space in particular, attention needs to be paid to how such space or spaces work best for big Financial Services companies. For those companies who need and want to actively collaborate, there is also a learning opportunity: not just in terms of examining products and services devised and developed by FinTech SMEs, but also examining, testing and potentially sharing their own technology.

## Support needs

#### **Providing business support**

- 3.30 The support environment in Scotland for start-up and growing businesses is generally considered to be good quality, comprehensive and fit for purpose. Despite this there is a consensus amongst both stakeholders and companies alike that it could be enhanced to better suit the particular needs of FinTech companies and address barriers to growth
- 3.31 In particular, there is evident need for better access to funding and financing for FinTech companies looking to grow/scale up. Feedback from the companies and suppliers of services to the sector suggests that whilst angel finance is reasonably good (albeit in danger of being less readily available due to a recent lack of exit activity) there are significant gaps in the investment landscape especially at the £500k-£2m level. It was mooted that public sector investment could usefully be used to help to de-risk this kind of larger scale private sector investment. Feedback from those consulted who are working with FinTech companies as advisers, suggests there is also a need for support for SMEs to become "investor ready"; it should be a key part of any business support offer to help them prepare proposals, pitch their ideas and ultimately access finance from a range of sources including banks, business angels and venture capitalists.
- 3.32 It is acknowledged that FinTech is not so different in terms of business support needs rather, it is the same as many other growth sectors. However, acquiring the sector specific skills and experience needed at the scaling stage is the real challenge for many companies. FinTech businesses need advice on issues ranging from business models and planning, to staff and HR, and guidance on developing their business based on market-pull factors rather than product push-strategies. Market driven insight and support is needed (for both trade and internationalisation opportunities) to help companies scale up, as is support to develop new routes to market, and new markets



- 3.33 FinTech SMEs report that they require support through the business-to-business selling process where they are trying to prospect and sell to larger corporate organisations. This would cover helping them to develop initial projects and early version products into fully working services and solutions. It would also include navigating procurement rules and processes, countering liability and risk which can pose a particular challenge for SMEs, and help to safeguard against larger companies taking over and simply implementing ideas themselves.
- 3.34 Importantly, there is a strong view that this support should come from those with experience who 'have been there and done it' and so have the knowledge, experience and also, the credibility. All of the companies consulted agreed that access to industry mentors would be invaluable, one had already had this type of support from Skyscanner staff. Meeting in their company premises would also benefit them and their staff. Trade networks have a role to play in encouraging established FinTech companies to mentor and assist newer FinTech SMEs.
- 3.35 This is where for example Codebase and Up Accelerator's Innovation Labs have proven to be successful. Using experienced tech entrepreneurs to provide guidance and mentoring to trading SMEs differentiates them from other incubation space and acceleration programmes in Scotland. Providing wider access to such experience and advice from current practitioners and those with the track record of scaling up companies is invaluable to FinTech companies.
- 3.36 Another key support gap is the provision of support on regulatory requirements. Many FinTech SMEs require assistance in navigating extensive documentation, understanding legal and ethical necessities around handling, transferring and storing 'client money', and other aspects of FinTech. Meeting the costs of these is understood to be prohibitive for many FinTech start-ups, and is therefore a considerable barrier to growth. A current initiative from the FCA involves the development of a 'sandbox' to test regulatory compliance and market readiness and they are proactively encouraging Scottish FinTech applicants.

#### Space for FinTech companies

- 3.37 As presented in Chapter 2, there is a good supply of physical space for start-ups in Scotland. Accepting that these spaces do not require to be FinTech specific but can cater to those in the wider technology sector and other sectors, it is important to recognise that these spaces also present an opportunity for FinTech start-ups to meet and network with other (preferably tech) start-ups facing many of the same challenges.
- 3.38 For more established FinTech companies, however, the priority at their stage of development is the provision of wrap-around business support. Specialist knowledge of the sector, its markets and customers is a critical component of the support. This is key for both the companies and their (potential) investors. Physical office accommodation, co-working space or technical support is of secondary importance.
- 3.39 Although not considered a priority for public sector support, consultees' highlighted that finding office accommodation is challenging in city centre locations, especially Edinburgh, where the largest FinTech cluster is located. In one FinTech company's case, it had outgrown its space at the incubation hub in which it was based. Despite the facility being well-suited to their needs, close to their customers and similar companies, the company thought that they were going to have to move, until they found a bigger office in the hub at the last minute.
- 3.40 This is more of an issue for providers of start-up space as it raises the question at what point should an incubation facility require the start-up to 'move on' freeing up space for other pre-starts and early stage companies. Tontine in Glasgow has faced this challenge with established companies also



being tenants. However, finding big enough office space in urban centres to house increasing staff numbers is always likely to be a challenge for growing companies.

3.41 There is clear evidence from consultees of an appetite for dedicated space of some sort for the sector. A space whose purpose is to act as the conduit for support, collaboration and knowledge exchange, as opposed to a space in which FinTech companies can physically locate. It must help to underpin the creation of an environment in which FinTech companies can thrive.

"It is easy to make a new physical space but it is more difficult, and more important, to create the right environment with the right services."

- 3.42 Equally important for companies and suppliers to the sector is the view that the clustering of FinTech companies in specific urban locations "makes sense" and the provision of, and access to hub(s), where meetings and activities can be held that provide a focus and profile for the sector and allow companies to collaborate and build relationships is what is needed at the moment.
- 3.43 Companies report that a virtual only hub/collaboration facility would be quite challenging to make work due to the issues of companies not being to meet in the same place, being time poor most of the time and the need for a strong rationale to get together virtually. Although virtual delivery models are currently employed for some accelerator programmes in the UK and abroad, access to space for the implementation of these programmes is still usually necessary to some extent.

#### **Enabling collaboration**

3.44 There is a need to foster greater levels of collaboration in the FinTech sector. As one consultee noted:

"[There] needs to be something that brings people together, and actively fosters collaboration."

- 3.45 There is general consensus that the wider FinTech SME community in Scotland is close-knit and collaborative. Evidence shows that there is an appetite to network and collaborate as demonstrated by the number of community driven meet-up groups already in existence, e.g. Blockchain, University FinTech Societies, etc. Companies consulted stated that collaboration activity should focus on facilitating company to company relationships as collaboration between universities is already well established and they tend to be more R&D focussed rather than product focussed or commercially attuned to market drivers and demand. FinTech Scotland is perceived as helping to enable and develop this collaboration. One company noted that the introductions made through FinTech Scotland have developed into viable opportunities for formal collaborative working in order to diversify and expand its activity into banking. A network integrator has recently been appointed by FinTech Scotland and SE to build on this type of activity, and accelerate the growth of companies with potential by providing routes to market through facilitation of collaborations and investor introductions.
- 3.46 Facilitating collaboration will directly support innovation, entrepreneurship, generation of ideas and product/service development. FinTech Scotland is in an ideal position to continue its work on encouraging and enabling collaboration, and allow companies to share ideas, approaches, and even costs or risk:

"Ultimately, doing stuff costs; it's nice to be able to share these [development] costs, and share the benefits too."



- 3.47 However, the evidence from the research shows that there is a need for a 'venue' or space where collaboration can take place and be catalysed. Innovation is often viewed as a 'contact sport', and so it follows that it requires a physical space to provide opportunities to develop creative ideas, exchange resources and share talent. As already discussed earlier there is a plethora of space currently available which could be utilised to facilitate the need for a hub/collaboration space. However, to date there has not been the co-ordination or organisation of FinTech specific activity which has required a dedicated space or spaces. A fixed space (or series of spaces over time) is considered by both companies and stakeholders consulted key to developing the sector and giving it a profile, focus and identity. This could be in the form of a strategic hub discussed later in Chapter 4. This would help to add cohesion to a nascent sector, and help to give it more of a strategic presence and direction. Such a space may also help to focus the activity of FinTech Scotland. There is clear agreement that FinTech Scotland is effective in its role so far, facilitating greater networking and collaboration, and raising awareness in the sector. However, it is arguable that the delivery needs to be rooted in a more visible place. This will help to expand FinTech Scotland's brand.
- 3.48 Aside from using existing facilities more flexible approaches can also be considered and employed to provide a wider network of locations which would be able to service all parts of the FinTech ecosystem. For example, Up Accelerator rents space in existing facilities such as Codebase, or makes use of empty space to set up temporary labs in the premises of client companies posing a challenge to allow SMEs to engage in demand-led innovation. International examples of this approach include Bhive in Brussels and Boston FinTech Sandbox.
- 3.49 Collaboration space should also meet the needs of larger companies, allowing them to engage with and collaborate with SMEs in neutral territory so they can influence and benefit from the research and innovation of SMEs and work with them to address business challenges.

"[There needs to be a] focus on the relationship between the disruptors and corporates;

FinTech is both a threat and opportunity to big corporates."

3.50 In addition to this, big corporate Financial Services organisations require a 'neutral' venue to undertake their own innovation or agile working on new products and services. This was reported by two of the larger companies consulted with. Such companies often find it very difficult to undertake effective and meaningful agile working or innovation within their 'business-as-usual 'structures and spaces. A collaboration space or hub could provide somewhere off-site for bigger companies to have agile teams working on innovations over a short-term but intensive period of a few months, and then bring them back in-house to implement the developed innovations, as suggested by one consultee. This is where exposure to disrupting SMEs can help – by facilitating access to new ways of thinking, differing perspectives, etc. It also enables access to potential customers for SMEs. One large organisation noted that their preference would be to have an "open, in-the-field innovation lab", rather than try to work in such ways internally.

#### **Skills**

- 3.51 There are a number of skills challenges faced by FinTech SMEs. Addressing many of these challenges naturally sits with Skills Development Scotland, the Scottish Funding Council and Universities, rather than with Scottish Enterprise. However, there it is imperative that there is a joined-up approach across enterprise and skills agencies in line with the direction of travel set out in the Enterprise and Skills Review Phase 2 findings.
- 3.52 In the consultations, there was broad agreement that, there is a shortage of skills in FinTech SMEs, and it can be hard to recruit people. In particular, there is a lack of software developers. This is reinforced by findings from ekosgen's research on Digital Technologies skills in Scotland for SDS. That



work identified lack of developers as a challenge across Digital Technologies more widely.<sup>53</sup> Whilst Digital Technologies start-ups will have the digital/developer skills they require, FinTech companies are more likely not to, with many FinTech entrepreneurs coming from a financial rather than a digital background. Attracting talent for other types of roles such as technical sales, product development roles, and user experience (the latter being essential for consumer-facing products such as mobile apps) can also be challenging.

- 3.53 It is also apparent through the research that a number of FinTech companies lack expertise and experience in Digital Technologies on their boards of directors. This is considered to be an important issue to address, through providing access to non-executive directors (and mentors) with Digital Technologies experience.
- 3.54 For some SMEs, there is also perceived to be a risk in employing additional staff. This is both in terms of outlay for recruitment, as well the salary and on-costs for additional staff at a time when SMES are trying to grow, but are not certain of revenue generation opportunities and/or levels.

<sup>&</sup>lt;sup>53</sup> ekosgen (2017) Scotland's Digital Technologies Sector Analysis: Final Report for Skills Development Scotland



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## 4 Towards an approach to supporting FinTech

### **Headline messages**

- There is little or no need for new FinTech-specific incubator space as there is already a considerable supply that caters for FinTech start-ups.
- As well as continuing support to FinTech start-ups, there is a need for support to be targeted at
  growth stage SMEs, which make up the majority of the Scottish FinTech sector. These
  companies require more specialist support, and should be a priority for development.
- To develop this growth stage support there is a need to focus on specific approaches and
  packages of support, rather than the provision of space for business growth. This includes the
  development of accelerator programmes, creation of collaborative environments involving
  FinTech SMEs and incumbent Financial Services companies, and business support tailored to
  the FinTech sector.
- Finance for growth is also important and there is a need to enable greater access to finance for growth stage FinTech SMEs.
- Whilst there is little appetite for increased incubator space or office accommodation for business growth, there is a need for space to facilitate collaboration, and act as a strategic anchor for the sector. This should be a space to host community and acceleration-type activities and encourage collaboration between SMEs and corporates from other sectors.
- The preferred option would be for this to be delivered through a dedicated, strategic hub. This
  should be based in the main cluster of Edinburgh. To ensure ease of access in other areas, a
  FinTech presence could be delivered through a franchise or partner model.
- Other key areas for consideration include the targeting of different but connected sectors e.g. Cybersecurity and the potential for revenue generation through a membership system.

#### Introduction

4.1 This chapter sets out the conclusions for supporting Scotland's growing FinTech sector, and the role that space tailored to suit the needs of FinTech companies can play in providing this.

#### **Conclusions**

#### **Targeting support**

4.2 There are a number of considerations for addressing the support – and space – requirements of FinTech companies. Of these, the key considerations is where best to target support in terms of target audiences and market segment(s), considering business life-cycle stage and sub-sector requirements.

#### Start-ups

4.3 Start-ups must continue to be an important area for attention for sector development, not least because this will ensure a continuous supply of innovation and attract talent to the sector. Developing a critical mass of FinTech (and related) companies in Scotland has been a strategic focus in recent years, and this should continue, to ensure that the sector remains vibrant and dynamic, and maximises the growth opportunities.



- 4.4 However, it should be stressed that there is little or no need for new FinTech-specific incubator space in Scotland. There is a considerable supply of existing start-up incubator premises throughout Scotland (as summarised in Appendix 2), which is in a position to cater for FinTech start-ups. Though this is not solely dedicated to FinTech, both strategic and industry informants agree that FinTech companies are more than able to fully benefit from non-specific start-up incubation space there is no need for a 'special' facility.
- Additionally, there are a number of facilities that either have opened recently, or are coming on line imminently. For example, the University of Strathclyde has plans to expand the support it offers to FinTech pre-start-ups and start-ups through the next phase of its Technology Innovation Centre development, drawing on its existing Growth Accelerator Programme to deliver tailored FinTech start-up support. The OGTC's Tech X accelerator provides space, funding and wider business support to Tech-focused start-ups. Tech X Plus will open later in 2018, taking space in Aberdeen's new Elevator facility. Codebase Stirling has been open for just over a year, and ONE Codebase, a collaboration between Codebase and Opportunity North East, is due to open new incubation space in Spring 2019.
- 4.6 This, along with the wide range of university activity to develop spin-outs and supporting start-ups, and the existing access to programmes and wider business support for FinTech start-up companies, indicates that FinTech start-ups are not a priority target audience in terms of enhanced support/space provision. Therefore, there is no need for specific incubation space for FinTech companies at this stage.

#### **Growth SMEs**

- 4.7 In terms of addressing key market need, attention should be paid to the established companies and more mature SMEs that are looking to grow. This is of course said in recognition of the fact that these are already the target market, and may also be in receipt of other forms of public sector support. Scotland's FinTech sector is broadly characterised by these companies, and this is where support should be targeted for growth and acceleration, rather than incubation, in order to gain the most traction for, and exploit opportunities in, what is a very fast moving sector.
- 4.8 As discussed earlier, FinTech companies at the scaling stage have the most need for specialist support to grow their business. This is currently only available through a small number of suppliers, and includes more sophisticated modes of support to access introductions to, and build relationships with, customers and investors. The latter type of support is in its early stages in the main, within the Scottish FinTech support landscape.
- 4.9 The limited supply of this type of support for growth SMEs further supports the conclusion that growth stage SMEs be considered the priority audience in terms of enhanced support in order to accelerate growth the question of the provision of space is discussed later in this chapter.

#### **Support solutions**

4.10 An important consideration for the provision of support to grow FinTech companies is the creation of an open, vibrant and nurturing environment. There are some strong examples of this focus on the support package, with space being a secondary consideration. For example, MaRS in Toronto is a series of accelerator programmes offering access to a range of services. In Canary Wharf's Level39, though space is a major component of provision given the Canary Wharf Group's access to a large portfolio of property, the emphasis is very much on the support provided, and the environment that is created. For both Level39 and MaRS the critical component is the creation of a supportive environment to foster collaboration and innovation amongst FinTech companies.



4.11 Specific approaches and packages of support should therefore be developed to support those companies and sub-sectors considered to have growth or scale-up potential.

#### **Accelerator programmes**

4.12 It can be argued that there is a need to put an accelerator programme in place as mentioned by both companies and existing suppliers to the sector. Many FinTech companies are seeking growth support. Universities are moving to establish more accelerator programmes, though these are anticipated to be delivered to small number of FinTech companies at any one time and more likely those at the pre-trading stage. They are also more likely to meet the needs of companies established by staff, students and alumni, rather than the wider business base. For some specific sub-sectors and areas within the FinTech ecosystem, for example Blockchain and Artificial Intelligence, the market has already begun to recognise the need to accelerate activity and in response, is working to create its own accelerator support programmes. For example, this includes the development of the Wayra Accelerator in Edinburgh which will be delivered in partnership by University of Edinburgh and Telefonica. This reflects the opportunities and challenges within different sub-sectors of FinTech. However, the existence of these programmes indicates a wider need across the FinTech sector *more generally*. SE has a role to play here in ensuring that the sector and its sub-sectors' needs can be met in Scotland.

#### Fostering collaboration

- 4.13 As discussed above and in Chapter 3, there is a clear need to foster greater levels of collaboration between FinTech SMEs and incumbent Financial Services companies. There is an opportunity to: address sector-wide challenges; embed innovation within incumbents; future-proof the sector; overcome the (perceived or real) 'disruptors-versus-disrupted' competition; and foster an environment defined by demand-led innovation and co-opetition.
- 4.14 There are many common opportunities and challenges facing both FinTech and Financial Services companies that can be addressed effectively through collaborative working. There is an opportunity for Scotland to demonstrate an industry-level collaboration, co-ordinated by an industry body. There is a role here for FinTech Scotland to help facilitate collaboration and co-opetition on issues of strategic importance to Scotland.

#### **Tailored business support**

- 4.15 Since many companies require assistance in scaling up, the products across Scottish Enterprise's investment, innovation and high growth intervention frameworks should be deployed to best fit the FinTech sector in Scotland i.e. a bespoke support package for FinTech. This does not mean the development of new support products or services, but rather using these flexibly and working differently to apply the products and services to the sector. Equally, better description or 'pitching' of projects to FinTech companies through signposting would help to make it easier to adopt.
- 4.16 Access to mentors and entrepreneurs that can help to scale up FinTech companies is key here. Being able to tap into the experience and skills to successfully scale is the real challenge for Scotland's FinTech companies. This is something that both Accelerate Places and Level39 are able to offer. Accelerate Places taps into the expertise of Blenheim Chalcot's staff, associates and its wider networks, including companies that it has previously supported to grow. Level39 has access to an extensive pool of actors across large Financial Services corporations, legal experts, regulators, etc., all within close proximity in Canary Wharf, the wider docklands and the City.
- 4.17 Working with industry and its various trade bodies and international partners should help better facilitate this in Scotland. FinTech companies will also benefit from access to other forms of support,



such as sandboxes<sup>54</sup>, demand-led innovation or accelerator challenges, etc. It is important to note that these support services do not need to be delivered within a given space (i.e. for hosting business support activity), but they can be afforded this, if necessary – through rented space, etc. That said, it is worth stressing that FinTech businesses prioritised support over any space requirements for company growth and development.

#### Finance for growth acceleration

- 4.18 There is a need to enable greater access to finance for FinTech SMEs, particularly for helping to accelerate growth and scale up. While this is not unlike the need for investment in other sectors, providing funding or financing to companies operating within wider Financial Services has historically been viewed as sensitive, not least because of the lack of apparent market failure. However, because of the emergence of new disruptive technologies, and the requirements for Financial Services to change, funding is increasingly being targeted at specific challenges facing Financial Services providers. This approach can be extended by FinTech to target other vertical sectors. It can be coupled with accelerator challenges to fund project-specific innovations that may also allow companies to scale up.
- 4.19 For financing company growth, it is arguable that a mechanism similar to the Scottish Investment Bank's Renewable Energy Investment Fund (REIF), targeted at FinTech companies, could help to accelerate growth and support Scottish FinTech SMEs in to the global market place. However, ERDF-funded support through the Scottish Investment Bank (SIB) precludes regulated activity. That said, the SIB could make some direct investment without ERDF-matched funds, where there is a compelling business case, and also with SIB acting as a junior investment partner alongside private sector investors. It is also worth noting that not all FinTech company activity falls within the regulated space, e.g. through the provision of solutions and services to Financial Services companies, where it is only the activity of the latter that is deemed to be within the scope of regulated activity.
- 4.20 An alternative may be to establish a mechanism through which international investors are able to invest in Scotland's FinTech companies, given the reported reduction in angel and venture capital investment and investors that are investing in Scotland. This could feasibly form part of the activity or offering of a hub for FinTech, acting as gateway for potential overseas investors to gain access to Scotland's FinTech SMEs, and a route to alternative financing for SMEs. This may also serve to increase the value of companies invested in.

#### **Skills**

- 4.21 Skills Development Scotland's Digital Technologies, and Financial Services Skills Investment Plans (SIPs) set out strategies and actions to attract and develop the required talent across these sectors. Both SIPs are targeting the identified shortages in terms of skills development that affect FinTech companies.
- 4.22 However, as well as the identified shortage, there is a potential risk for FinTech companies employing additional staff. One suggested solution is creation of a centralised talent pool to provide resource into companies. This would help mitigate the risk to FinTech SMEs that are aiming to scale up of recruiting and employing additional staff at a time in their development when resources may be constrained or uncertain. It could take the form of an innovative approach to a work placement programme; a graduate scheme or similar where individuals commit to a *sector* placement, rather than a single company, in a similar fashion to placements for teaching or dentistry. Abertay University runs a similar scheme of placements for its Cybersecurity and Ethical Hacking students and graduates

<sup>&</sup>lt;sup>54</sup> It was noted during consultations that there is presently no critical mass in Scotland to make a Scottish-specific sandbox viable. In this instance, access to existing sandbox facilities should be explored; alternatively, creation of a Scottish-based sandbox that is open to all may be a possibility.



through the Scottish Business Resilience Centre. It could potentially provide a steady flow of qualified people, with no risk of contracting for the SME, and reduced risk or uncertainty for the individual taking on the placement.

4.23 Another option is a 'workforce of the future' model currently being explored by Sopra Steria. This involves a hub to host self-employed FinTech contractors or small start-ups, which are helped to tender for contract opportunities with larger Financial Services companies, whilst also engaging in collaborative working and supported through mentoring, etc. A hub may also act as a base for the sector placements programme, outlined above.

## Provision of space

#### A FinTech space as an anchor

4.24 Space sits at the centre of any solution package to meeting the support needs of the FinTech sector. It can provide a medium to help deliver the required support solutions for FinTech companies. Equally, space would help to secure interest in Scotland as a global player, and help to create a rationale to bring FinTech companies and actors together. As an industry representative body, FinTech Scotland should be a part of this space. Being anchored in a more visible place will better position it to deliver against its six key objectives, and therefore strengthen Scotland's position in the global FinTech ecosystem. However, there is a clear need to ensure that such a space is market driven, and serves the needs of Scottish FinTech rather than replicate offerings elsewhere.

### Meeting the requirements of growth companies

- 4.25 In addition to the need for support described above, the research evidence suggests that growth companies *do* have a space requirement. However, this should be a space to facilitate collaboration rather than the provision of office accommodation. There is limited appetite amongst existing FinTech companies for office space/premises, though it is worth clarifying that though there was no evidence of a need for tenancy from the companies and stakeholders consulted, this does not preclude the existence of demand more widely amongst other Digital Technology or Data companies.
- 4.26 Further, there are limitations to creating a space that could house multiple companies in the growth stage. A FinTech hub that incorporated office space would have to restrict the number of scale-up companies that could be accommodated given the staff numbers that would be involved. It would become unviable in financial terms to provide a very large facility in terms of space.
- 4.27 If individual companies require office/co-working space, there are existing cross-sector hubs offering this. For example, the Tontine Centre in Glasgow is targeted at SMEs in their second and third years. It provides meeting rooms and event space, and provides access to a business adviser, as well as a link up with the University of Strathclyde, as well as hosting some SMEs though available office space.
- 4.28 Universities can potentially provide such facilities. As well as producing many high calibre graduates each year, a number are moving into the space of providing incubation or acceleration hubs, such as the University of Edinburgh's Bayes Centre, or Strathclyde through proposals for its Technology Innovation Centre Phase 2.



### **Defining space requirements**

- 4.29 Growth stage SMEs should be considered the priority audience in terms of enhanced support and new space for scaling-up SMEs. There is a need for a hub space that serves all parts of the FinTech ecosystem, and is able to facilitate the support required by FinTech companies to scale up.
- 4.30 An industry hub will provide access to high-quality facilities (including meeting and hospitality facilities), a venue for collaborative activity amongst SMEs, and with incumbent Financial Services companies, and the right services provided through the hub to help businesses grow. Provision of good accelerator programme support for growth companies at scaling stage and the right environment in which to develop is essential to offer the best chance of sustainability and growth for FinTech SMEs.
- 4.31 At this juncture, it is important to set out the requirements for physical space for FinTech what the space should be, and importantly, what it should not do, or provide. Based on the research findings and conclusions any space dedicated to FinTech should:
  - Provide a focal point for FinTech-related activity in Scotland, and ensure a presence (physical
    or virtual) for sector leaders Financial Services companies, business support and enterprise
    agencies, regulators, academics, and industry bodies;
  - Support collaborative activity between FinTech SMEs, large Financial Services corporations and companies in related/aligned sectors;
  - Act as space in which SMEs and large Financial Services corporations can interact, demonstrate products, services, opportunities or needs in a neutral marketplace venue, or participate in demand-led innovation or accelerator challenges;
    - As part of this, act as an 'in-the-field' location for large Financial Services corporations to site agile working and innovation project teams for defined periods of activity;
  - Provide a conduit for business support as a first 'port of call':
    - Signposting to appropriate business support products, either from Scottish Enterprise or other avenues, e.g. university accelerators;
    - o Serve as a venue for SMEs to meet with advisors, mentors, etc.; and
    - Act as a gateway for potential domestic and international investors to access opportunities in Scotland's FinTech sector.
  - Provide a venue for meetings, networking events, seminars, exhibitions and technology showcasing and so on – though equally, existing event space at partner locations and elsewhere in Scotland (such as conference centres) can be also be exploited to deliver some of this activity;
  - Serve as an anchor space for FinTech Scotland, to give it greater visibility, and a location through which to fulfil its six key deliverables; and
  - Not provide office accommodation for FinTech companies.

### Delivering the required space

4.32 Taking the form of a sector hub, the space needs to be much more than a high-specification building. It should be a place to host community and acceleration-type activities, encourage open collaboration between SMEs and corporate organisations, and develop a resource marketplace. Its focus should on publicising activity, problem solving, and match-making between SMEs and incumbent



Financial Services companies. Such a hub will allow FinTech Scotland and support providers, such as Scottish Enterprise, to more easily provide strategic direction for the sector.

4.33 Given these conclusions, a high-level appraisal of options for the provision of space is set out below. This examines the suitability of the three models set out at the start of the report to meet the requirements above.

### Dedicated, strategic hub

4.34 This option provides a strategic hub that acts as an anchor for the FinTech sector in Scotland. However, in contrast to the 'tenancy' model originally discussed, where FinTech companies could take office space, this option instead provides a shared space for strategic actors and activity, as well as providing a neutral venue in which FinTech SMEs and larger corporate Financial Services companies can interact.

	Acceleration	Collaboration			
Advantages	A dedicated, strategic space offers a focal point for growing FinTech SMEs, and ultimately the industry     Necessary business support can be tailored specifically for FinTech and channelled through the hub     A dedicated hub would also have the ability to host accelerator programmes     Can provide lab space which can be easily customised	<ul> <li>A dedicated hub can help to bring likeminded companies together</li> <li>Such a space is able to create a 'marketplace' for: SMEs to showcase talent, products, services; corporates to demonstrate opportunities and challenge</li> <li>It provides a neutral venue for corporates to engage with SMEs, will facilitate more open form of collaboration</li> </ul>			
Disadvantages	There is a saturated market space in terms of accelerator and/or incubation space  Market is already moving to provide its own accelerator programmes, and universities are also moving into this space	Not all collaboration requires an open venue     A FinTech-specific space may preclude other sectors/sub-sectors, so careful messaging would be required			
Other considerations	<ul> <li>FinTech businesses don't need specialised, dedicated office space but sector specific business support; however, there is a clear need to anchor this in a space that creates a vibrant, dynamic environment reflecting the nature of the companies in the sector</li> <li>A new build facility would necessarily incur a substantial cost and time delay. A facility with 3,000m² of floorspace, accommodating shared space and facilities, meeting rooms and event spaces, labs, etc. would cost in the region of £10 million, and would likely take between 3-5 years from project design through planning and construction to completion; the market is likely to have moved on by the time this is built out, given the pace of change evident in the sector</li> </ul>				

#### Provision of space through partners: universities

4.35 This option seeks to provide a FinTech hub through a partnership arrangement with a university. This could possibly take advantage of one of a number of recent developments targeting FinTech.



	Acceleration	Collaboration		
Advantages	<ul> <li>Universities provide an innovative environment with access to research expertise</li> <li>Could provide accelerator space for FinTech companies where this is needed</li> <li>Number of university-based hubs in existence or development targeted at SMEs</li> </ul>	<ul> <li>Can bring together public, private and academic collaborators through triple helix approach</li> <li>Neutral venue for corporates to engage with SMEs, can facilitate more open form of collaboration</li> <li>Universities in Scotland in relatively close proximity to target market of FinTech SMEs and Financial Services, esp. in Edinburgh and Glasgow</li> </ul>		
Disadvantages	<ul> <li>Such a space may be primarily focused on university staff/students/alumni and spinout activity</li> <li>Universities are more likely to focus on incubation and initial development of start-ups and SMEs, rather than scaling up</li> <li>University premises are not ordinarily suited to accommodating or advising scaling up SMEs</li> </ul>	May be focused on university staff/students/alumni, or may require involvement of university in collaboration – could be restrictive?     There is a perception that universities may want to lead and control outputs of collaboration to secure IP or contribution to research outputs, e.g. for submission as part of Research Excellence Framework submissions, so established SMEs may be reluctant to engage		
Other considerations	This is an area of development for a number of universities, and a number of hubs are in the pipeline. Universities offer potential for cross-over with other disciplines, e.g. Cybersecurity			

### Provision of space through partners: businesses

4.36 This option would seek to establish a dedicated FinTech hub that is hosted by a (Financial Services) business partner, within available office accommodation.

	Acceleration	Collaboration		
Advantages	<ul> <li>Access to business expertise and specialist support is a given</li> <li>If needed, partner businesses could provide access to quality, high-spec accommodation for SMEs scaling up</li> <li>Co-location can offer proximity to a key customer</li> </ul>	Provides ideal space for 1-2-1 SME- corporate collaboration, esp. if to work on specific challenges (demand-led innovation)		
Disadvantages	<ul> <li>Business support provision may need to be sourced from elsewhere, and may be difficult to integrate</li> <li>Could end up constraining market/customer options of SMEs</li> <li>Where office space is needed, SMEs may be reluctant to locate essentially within larger corporate organisations – and this may not be a long-term option, depending on growth of company</li> </ul>	<ul> <li>Would not necessarily suit/facilitate open collaboration</li> <li>May still require event space/venue, depending on the space available to the host business</li> <li>This may not be seen as a 'neutral' space, and may not be conducive to producing a balanced collaborative relationship, as least at an early stage; SMEs may feel tied or under obligation – or even under threat</li> </ul>		
Other considerations	This is a relatively low-cost option; Financial Services organisations may be able to free up space, within their office accommodation – in a similar fashion to the FinTech hub at RBS in Gogarburn: through downsizing as a result of digitalisation, many bigger banks, Financial Services businesses, etc. will have available space It also offers a potential revenue stream for corporate businesses with long leases on office accommodation			



#### Provision of space through a franchise model

4.37 This model would seek to establish a hub for the FinTech sector in an existing accelerator, innovation or enterprise centre-type facility.

	Acceleration	Collaboration			
Advantages	Where available, can access quality, high- spec accommodation for growth SMEs	Offers exposure to other sectors/industries     A franchise model can provide a good environment to foster cross-sector collaboration			
Disadvantages	<ul> <li>Currently limited supply of accelerators suited to FinTech SMEs, and in general</li> <li>Companies looking to scale up in existing hubs could quickly be constrained by space</li> <li>Lack of specialist sector expertise and networks perhaps</li> <li>Many existing facilities are targeted at start-up and incubation – though there is growth in accelerator spaces</li> <li>Question of whether existing hubs would easily be able to tailor their delivery to meet the needs of FinTech</li> </ul>	Such an approach is not likely to be seen as attractive to larger corporate organisations			
Other considerations	Any open plan premises would be a showstopper for SMEs engaging with corporates to provide products, services. However, access to space for networking, events and meeting space could be possible.  This is a low-cost option that will not require any build-out, so there would be no delay				

#### A preferred option

- 4.38 Based on the above, the most appropriate approach to deliver a FinTech-focused space is through a dedicated, strategic hub. This on the basis that such an approach will best provide the space required to establish a strategic anchor for the sector. It will be most effective as a focal point for the industry, establish a presence through which to deliver tailored business support and co-ordinate collaboration, establish a presence for sector leaders from public, private and academic sectors, and help to create a vibrant environment in which to grow Scotland's FinTech business base.
- 4.39 With respect to developing a new FinTech hub, given the extensive existing physical infrastructure in Scotland and across the Central Belt in particular, there is no requirement to build a new facility. Costs notwithstanding, the likely 3-5 year lead-in time required for a new build facility does not allow for the activity and support required now for the sector given the speed of market development.
- 4.40 Scottish Enterprise, FinTech Scotland and partners should consider existing (or planned and forthcoming) commercial space or possibly available partner space in the first instance, and whether an existing building/space could be transformed to meet requirements. This will allow strategic partners to gain the most traction for the sector in the short term, through access to and use of facilities and start-up and/or accelerator programmes. It is also the most time- and cost-efficient and lower risk option. In all likelihood being managed by a third party at least in terms of facilities and premises, it will allow strategic partners to be more responsive and agile in responding to needs.
- 4.41 In that sense, what is being recommended is a middle ground of sorts between the options initially outlined. This will establish a permanent strategic hub for FinTech. In the absence of any available commercial space that could be repurposed to meet requirements, this could be achieved through a hybrid approach where the hub could be hosted in a partner location to negate time and cost



challenges. Were this to be the case, care would need to be taken to delimit the activities of the hub and of the partner, to ensure that the FinTech hub, and FinTech Scotland, were as distinct as possible from the host organisation.

4.42 However, such an approach should not preclude additional delivery through other models and approaches if there is a clear need to expand delivery on a geographical basis, or if other models are better suited to delivering particular components of support.

#### Cost of delivering the preferred option

- 4.43 The following is a high level assessment of the potential costs of the preferred option discussed above. Given that at this stage there is neither identified premises nor an outline design for the proposed hub, we have therefore been required to make a number of assumptions with respect to:
  - The required capacity and thus size of a strategic hub; and
  - How the resultant space might best be configured to reflect the intended activities to be undertaken in the hub.
- 4.44 Based on proxy indicators, supplier consultation and our experience of working with other centres, we would propose a total space of around 1,250 square metres would be appropriate for the intended activities of the Hub. For example a mid-sized enterprise or incubator facility is around 5,000 square metres, but this would include accommodation for 15-20 tenants taking up c.3,500 square metres.
- 4.45 Given the aspirations for the Hub to provide meeting and event space, labs and other shared space as identified through the research, we can anticipate that the hub is likely to require the following spatial areas:
  - Collaboration space comprising meeting rooms and labs which allows companies, corporates and other partners and stakeholders to collaborate on projects, access business support and conduct one-to-one business meetings.
  - Knowledge exchange space a multifunctional space to accommodate networking events, seminars, technology showcasing and other exhibitions and conferences.
  - Connecting space This would include e.g. the Hub reception, lounges or break out areas, hot desk area, staff and partner office accommodation, and supporting facilities like a café.
- 4.46 We propose that this space could potentially be divided as shown in the table below. This is based on a number of Centres which we have worked with in the past which have had similar requirements in terms of lab space versus other functional areas.

Table 4.1: Division of Hub space

Space	m²	Usage
Collaboration space	75	Meeting/lab areas x 5 with capacity for 6-8 people
Knowledge exchange space	675	Flexible exhibition space with capacity for 80-100 people
Connecting space	500	Reception, staff offices and shared areas

4.47 The set-up and running costs of such a facility as described above is likely to include the follow:



- Premises renovation and fit-out (redecoration, sound and lighting, IT installation, furniture and equipment)
- Rental cost of premises
- Operating costs (utilities, rates, insurance, catering, cleaning, comms, equipment leasing, marketing etc.)
- Staff salaries including NI and pension (Hub Manager, administrative and IT/Comms staff and others e.g. Advisers)
- 4.48 Providing a detailed business plan and associated financial budgets for the Hub is out with this project's scope and would require a more detailed project specification for the Hub to be provided by FinTech Scotland.
- 4.49 However, based on the space requirements discussed above we are able to provide indicative rental costs at current commercial rates<sup>55</sup> for the preferred location i.e. within the Edinburgh FinTech cluster.

Location	£ per m <sup>2</sup>	Total rental cost per annum	
Central Edinburgh	365	£456,250	
West Edinburgh	172	£215,000	
Edinburgh Park	215	£268,750	

- 4.50 There is the potential to reduce this cost if an appropriate, clearly distinct space could be secured within an existing partner's estate or premises where subsidised/discounted rental rates may be offered, as discussed above.
- 4.51 The timescales required for a new build facility would not serve the immediate needs of the sector and the existence of existing infrastructure also negates this route as discussed earlier. With respect to the preferred option of leasing premises as outlined above, the minimum timescale required would be six months from project commencement to Hub opening. This, however, is dependent on a number of factors, including: the search for and availability of premises; the securing of funding and associated processes for approval; legal processes; the procurement of goods and services; time required for premises renovation and fit-out; staff recruitment and development; and marketing of the Hub offer.

#### **Future considerations**

4.52 There are some areas for further consideration for industry, including Scottish Enterprise, FinTech Scotland and partners:

#### Location

4.53 There is a clear rationale for a hub to be situated near to Scotland's main FinTech cluster in Edinburgh, using the strategic model identified. This lends itself to the triple-helix approach required to deliver such a facility and ensure an open, transparent approach to collaboration that meets the needs of SMEs and large Financial Services companies.

<sup>&</sup>lt;sup>55</sup> JLL (2018) Quick facts: Edinburgh offices analysis, Q2 2018; Ryden (2018) The 82<sup>nd</sup> Scottish Property Review, April 2018



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- 4.54 However, ensuring access to support in other geographic areas in Scotland is important. This could be achieved with a FinTech presence delivered through either a franchise or partner model in Glasgow, Aberdeen and/or Dundee, taking into account the comparative advantages and disadvantages of each delivery model. FinTech is still a nascent sector in Scotland, so there is a need to support its development and growth at all stages and in all parts of the country. A flexible, solution-oriented hybrid approach as outlined above can make this more feasible.
- 4.55 There are existing delivery partners who have expressed an appetite to support the FinTech sector from current facilities, with a view to refining or expanding their approaches to incorporate delivering FinTech-specific business support. Taking advantage of this appetite will help to create an ecosystem of support space for a critical sector. Scottish Enterprise should therefore consider the best way to encourage use of this to extend reach.

#### **Targeting**

- 4.56 There must be an offer of support particularly targeting FinTech companies. However, it does not need to be (and arguably should not be) exclusive to FinTech, and could sit alongside or incorporate other Digital Technologies, such as Cybersecurity, given the complementarity and overlap.
- 4.57 Similarly, this space does not necessarily have to be completely dedicated to FinTech. As noted previously, there is significant benefit to exposing FinTech SMEs to a variety of sectors, approaches and viewpoints:

"Don't create an artificial box, or put artificial boundaries in place."

4.58 Consideration should be given to the most effective way to maximise the impact of any support and space package for the benefit of the wider Scottish economy.

#### Rules of engagement

4.59 One area of concern raised by large Financial Services companies and larger FinTech companies was the protocols for Financial Services companies to engage with FinTech SMEs in a collaborative setting. There is consenus that engagement and collaboration through a FinTech hub is open and transparent, and for the collective benefit of the Scottish economy, rather than for individual corporate benefit. Scottish Enterprise, FinTech Scotland and partners should therefore explore ways in which the participation of incumbents can best be managed, and the efficacy of a set of 'terms of engagement'.

#### **Terminology**

4.60 One longer term consideration is the terminology deployed around any new hub and associated support. There is a recognition that FinTech as a name or brand may be time-limited, and could serve to exclude relevant activity even within a short-term timeframe. This is undoubtedly a factor of FinTech overlapping with or touching on many different sectors, and other 'Tech' subsectors, e.g. RegTech. There is a clear need therefore to carefully brand and position the hub so that it is future-proofed.

#### Fully understanding business support needs

4.61 Though this research has touched on and identified the business support needs of FinTech SMEs, a detailed exploration of support accessed to date, the types of business development activities engaged in and future specific needs was out with the scope of this study. As a result, Scottish Enterprise and partners should undertake further research with businesses about their future development needs to fully inform the support delivery model.



#### Membership and revenue generation

- 4.62 One final consideration is the capacity for revenue generation through the hub. Since there is no need for office space to be provided (the earlier point regarding demand more widely in other Digital Technology/Data sub-sectors notwithstanding), there is no route to generate rent as part of tenancy agreements. A possible solution is to create a membership scheme for large Financial Services companies, key actors in the sector and other interested parties to access FinTech SMEs through the hub. A number of different models are used in accelerators and innovation centres across Scotland and the rest of the UK. For example, the OGTC employ a system where membership fees can be offset depending on the degree of collaborative activity undertaken.
- 4.63 The approach taken should be suited to the exact mix and nature of activity to be delivered. This should be explored in further detail.



# **Appendices**



# **Appendix 1: Consultees**

FinTech employers	Size	Location
API Software Limited	50+ employees	Glasgow
Clydesdale and Yorkshire Banking Group (CYBG)	Large corporate	-
Encompass Corporation	30-39 employees	Glasgow
Ingenico	Large corporate	-
Korala Associates	50+ employees	Edinburgh
Modulr	50+ employees	Edinburgh
Money Dashboard	20-29 employees	Edinburgh
Morgan Stanley	Large corporate	-
Nexves	1-9 employees	Aberdeen
Orca	1-9 employees	Edinburgh
Origo	50+ employees	Edinburgh
Royal Bank of Scotland	Large corporate	-
Sopra Steria	Large corporate	-
Sustainably	1-9 employees	Edinburgh
Tesco Bank	Large corporate	-
The ID Co.	20-29 employees	Edinburgh
Wallet.Services	10-19 employees	Edinburgh

Stakeholders
City of Edinburgh Council
Deloitte
Financial Conduct Authority
FinTech Scotland
Framewire
Nucleus Financial
Scottish Enterprise
Scottish Enterprise
Scottish Financial Enterprise
The Data Lab
University of Edinburgh
University of Strathclyde

Suppliers
Blenheim Chalcot/Accelerate Places
CodeBase
Elevator
Level39
Oil and Gas Technology Centre, TechX
Proposition B



Seed Haus
Tontine House (Glasgow City Council)
Up Accelerator
University of Strathclyde
Vivolution



## **Appendix 2: FinTech facilities/programmes in Scotland**

Name	Location	Type of facility	Target market	Description	Services
Royal Bank of Scotland FinTech Hub	Edinburgh	Accelerator	Aimed at start-up FinTech businesses.	The hub is Scotland's first specialist FinTech hub and is focused on the development and up-scaling of FinTech businesses. The hub offers free office space within RBS Headquarters and does not take equity.	<ul> <li>Free office space</li> <li>12 coaching sessions over 6 months</li> <li>Networking events</li> <li>Specialist programme of FinTech focused workshops</li> <li>Access to a large Financial Services organisation</li> </ul>
CodeBase	Edinburgh, Stirling, ONE CodeBase (partnership between Opportunity North East (ONE) and CodeBase) will be opening in early 2019	Incubator	Aimed at start-ups and growth stage companies within the Tech sector.	CodeBase is the UK's largest tech start- up incubator, and is one of the fastest growing in Europe. Its Edinburgh base hosts 100 tech companies, with the Stirling base hosting a further 12. The focus is on companies tackling challenges through technology, and this has included a number of FinTech businesses. As well as space, CodeBase has a focus on offering mentorship support and creating a supportive community for growing Tech companies.	<ul> <li>Co-working space</li> <li>Mentoring</li> <li>Networking events</li> <li>Advice</li> <li>Focal point to meet investors</li> </ul>
Wayra Accelerator	Edinburgh	Accelerator	Aimed at start-ups and spin-outs working within artificial intelligence and blockchain.	Opening in September 2018, the Wayra Accelerator will be an artificial intelligence and blockchain accelerator, delivered through a partnership between Wayra UK and the University of Edinburgh. It will accept 20 local businesses annually and will be open to spin-outs and start-ups. Participants will have access to Telefonica's, Wayra's parent company, global business. The programme is also receiving support from Scottish Enterprise.	<ul> <li>Business support</li> <li>Access to funding</li> <li>Access to business connections</li> </ul>



Name	Location	Type of facility	Target market	Description	Services
Up Accelerator	Edinburgh, Manchester	Accelerator (programme, not physical space except Manchester)	Aimed at start-up and growth stage companies across the health, media and finance sectors.	Up is a technology accelerator that works with start-up and scale-up companies across the health, media and finance sectors to support their business development. Successful applicants are provided with a bespoke programme of support from Up's network of global and local business leaders. Whilst there is a defined programme structure there is also a focus on practical activities to help grow businesses and to fit in with the demands of the business.  Also works with large corporates posing a challenge to tech SMEs in competition format.	<ul> <li>Advice</li> <li>Mentoring</li> <li>Access to investors</li> <li>Access to experts</li> <li>Access to large corporate clients</li> </ul>
Seed Haus	Edinburgh	Incubator	Aimed at start-ups in the Tech sector.	Seed Haus is a pre-seed tech incubator based around a community of entrepreneurs who invest £18,000 in five start-ups twice a year. These start-ups collocate within the Seed Haus office in Edinburgh and take part in an intensive 6 month acceleration programme. Following on from this each start-up remains a part of the Seed Haus network.	<ul> <li>Investment</li> <li>Co-location</li> <li>Mentoring</li> <li>Advice</li> <li>Access to investors</li> </ul>
Tontine	Glasgow	Co-working space	Aimed at start-up and growth stage Tech businesses.	Tontine is a Tech business co-working space, based in Merchant City in Glasgow. It is part of the Glasgow City Region City Deal and is supported by Glasgow City Council. Tontine aims to support the growth and impact of businesses through providing a collaborative office space, meeting rooms, office services, events and access to business support.	<ul> <li>Co-working office space</li> <li>Events</li> <li>Access to business adviser</li> <li>Access to business support organisations located within Tontine</li> </ul>
Elevator	Aberdeen, Dundee, Perth	Accelerator Co-working space	Accelerator programmes are aimed at growing businesses,	Elevator is a social enterprise which aims to support economic development through the delivery of business support	Advice     Mentoring



Name	Location	Type of facility	Target market	Description	Services
			they also have provision for start-ups through their other support services. They provide a selection of sector specific programmes within areas including Creative Industries and Gaming. They also provide programmes in a university setting aimed at students, academics and alumni. There are no FinTech specific programmes currently (though they have delivered FinTech events), but they aim to target companies within Tech growth areas, such as FinTech.	develop and refine programmes and	<ul> <li>Co-working space</li> <li>Access to business support</li> <li>Access to funding</li> <li>Events/workshops</li> </ul>
Pathfinder	Inverness	Accelerator (programme, not physical space)	Aimed at new Life Sciences or Technology companies or existing companies launching new products.	Pathfinder is a virtual accelerator programme based in the Highlands and Islands and run by Highlands and Islands Enterprise (HIE). It is focused on the Life Sciences and Technology sectors. The programme provides a 12 week intensive programme to test ideas followed by a further three months of coaching and mentoring support. The programme provides important business connections and access to information around funding. It is aimed at both new companies or existing companies launching new products.	<ul> <li>Virtual support</li> <li>Advice</li> <li>Business connections</li> <li>Coaching and mentoring</li> <li>Access to funding information</li> </ul>



Name	Location	Type of facility	Target market	Description	Services
CivTech	Edinburgh	Accelerator	Aimed at start-up or growth stage Digital Tech businesses.	Part of the Scottish Government's Digital Directorate and based within CodeBase, CivTech is focused on supporting businesses to develop new technologies that can help drive innovation in the public sector. The process starts with releasing a set of public sector challenges, businesses then apply with their solutions to these challenges. Successful businesses then take part in the acceleration programme, developing their solution, for four months. Support includes creating a practical pathway for participating businesses to secure public sector contracts.	<ul> <li>Collaborative working</li> <li>Support to develop products</li> <li>Access to public sector clients</li> <li>Advice</li> <li>Workshops</li> </ul>
Rookie Oven	Glasgow	Co-working space	Tech businesses, there are also more specific	Rookie oven is a co-working space for Tech businesses. As well as offering office space, it also aims to help emerging start-ups and foster a culture of collaboration. Rookie Oven also delivers an academy through a week of evening advice sessions for people aged 16-25 who are interested in starting a Tech business.	<ul><li>Co-working office space</li><li>Events/meet-ups</li></ul>
Techcube	Edinburgh	Co-working space	Aimed at Tech start- ups and small businesses.	Techcube is a co-working office space for Tech start-ups and small businesses. Through its community spaces it aims to foster collaboration and also delivers events.	<ul><li>Co-working office space</li><li>Events</li></ul>
RGU Digital Incubator	Aberdeen	Incubator	Aimed at students with business/product ideas within the Digital Tech sector.	Based within the School of Computing Science and Digital Media, the RGU Digital Incubator supports students to develop digital business ideas and products.	<ul> <li>State of the art equipment</li> <li>Meeting room</li> <li>Advice</li> <li>Business support services</li> </ul>
Dundee University Incubator	Dundee	Incubator	Aimed at start-up and spin-out companies	The incubator has 12 units available for Tech start-up and university spin-out companies. The aim of the incubator is	Office space



Name	Location	Type of facility	Target market	Description	Services
			from the university within the Tech sector.	to encourage spin-out company activity and the location of high-tech companies in Dundee.	
TechX	Aberdeen (at Oil and Gas Technology Centre)	Accelerator (programme, and physical space) Expanding into new Elevator space as TechXPlus – Oct 2018 and ONE Codebase Spring 2019	Aimed at start-up and small and medium Tech companies with products of relevance to the Oil and Gas industry.	TechX is an accelerator focused on Technology companies with products of relevance to the Oil and Gas industry. It runs a number of programme for startups and small and medium companies. Successful applicants gain access to mentors, coaching, funding and expertise.	<ul> <li>Office and hot desking space</li> <li>Mentoring</li> <li>Advice</li> <li>Funding</li> <li>Expertise</li> <li>Technology validation support</li> </ul>
Strathclyde University Incubator	Glasgow	Incubator	Aimed at start-ups and downsizing businesses. There is special provision for Tech businesses within the Strathclyde Enterprise Hub.	Provides office space, advice and support to start-up and downsizing businesses, Tech start-ups can first work with Strathclyde's Enterprise Hub for market research and business planning support before moving into the incubator which offers support around marketing, finance, product development, IP, sales and governance.	<ul> <li>Office space</li> <li>Advice</li> <li>Support services</li> <li>Support with funding and access to investors</li> <li>Digital enterprise support (for businesses that are not ready for physical space)</li> </ul>
Edinburgh Innovations	Edinburgh	Incubator	Aimed at students and staff at Edinburgh university who are looking at setting up start-ups and spinouts. Also offers facilities to companies looking to work collaboratively with the university.	Based at Edinburgh university, Edinburgh Innovations promotes the university's research, technology and facilities using the expertise at the university to develop relationships with industry and foster start-ups and spin- outs. FinTech Scotland is based within Edinburgh Innovations.	<ul> <li>Consultancy support, advice and events for staff looking to commercialise research</li> <li>Start-up workshops, boot camps and advice for students</li> <li>Workshops, events, collaborative partnerships, consultancy services, studentships, access to facilities and expertise for companies</li> </ul>
Edinburgh Business School Incubator	Edinburgh	Incubator	Aimed at graduates with start-up ideas,	Newly opened start-up incubator based at Edinburgh Business School, Heriot-	Free collaborative office space



Name	Location	Type of facility	Target market	Description	Services
			also open to other start-up businesses.	Watt's graduate business school. Particularly aimed at graduates and alumni, but also open to other companies. The initial intake of nine companies includes tech focused businesses.	<ul><li>Mentoring</li><li>Advice</li><li>Access to business training and speaker events</li></ul>
Data Lab	Edinburgh, Dundee and Aberdeen	Innovation Centre	Works with partners working in Digital Tech from academia, industry and the public sector.	The Data Lab is one of eight Scottish Funding Council funded innovation centres. It works to facilitate and enable collaborative projects between industry, the public sector and academia in order to develop new data science research and capabilities. In doing so it aims to develop the local ecosystem and generate economic growth through data.	<ul> <li>Ecosystem building</li> <li>Fostering collaborative links</li> <li>Supporting collaborative research projects</li> </ul>
Strathclyde FinTech hub	Glasgow	Innovation centre and accelerator	Pre- and post-start-up FinTech companies	The FinTech hub development at University of Strathclyde will work with a small cohort of small pre- and post-start-up FinTech companies to help accelerate companies. It will form part of Strathclyde's Technology Innovation Centre 2, and focus on staff, student and alumni spin-outs and start-ups, as well as other small enterprises with high quality FinTech propositions. It will make use of Strathclyde's Enterprise Hub, as well as being able to draw on the university's wider infrastructure	Strathclyde Business Growth Accelerator Programme  Mentoring





## **Appendix 3: FinTech facilities/programmes outside of Scotland**

Name	Location	Type of facility	Target market	Description	Services	Size and date of establishment
The Floor	Tel Aviv and Hong Kong	Accelerator	Aimed at FinTech start-up/disruptor companies who develop products to address the needs of large Financial Services companies.	The floor is a global FinTech innovation centre, based at the Tel Aviv Stock Exchange. The Floor is a membership organisation consisting of large international Financial Services companies and FinTech start-up/disruptor companies. The process works by the large Financial Services organisations identifying key challenges, which are then matched with FinTech start-up/disruptor companies who develop solutions using The Floor's innovation labs. (similar in concept to Up Accelerator challenges above)	<ul> <li>Co-working space</li> <li>Mentorship</li> <li>Access to international Financial Services companies</li> </ul>	<ul> <li>Established 2015</li> <li>Working with six of the largest Financial Services organisations</li> <li>Number of members unknown</li> </ul>
Copenhagen FinTech Lab	Copenhagen	Incubator	Aimed at FinTech start-ups.	Led by the Copenhagen FinTech industry body, Copenhagen FinTech labs is currently home to over 170 FinTech start-ups over 2,000 square metres of space. The focus of the facility is on offering effective co-working space that can support start-up development. The Lab also supports international connections – tenants can work alongside other FinTechs visiting other hubs such as the Innovation Centre Denmark in Silicon Valley and Rainmaking Loft in London. Copenhagen FinTech also offers a wider	<ul> <li>Co-working space</li> <li>Mentoring from key sector stakeholders</li> <li>Advice</li> <li>Links with the Danish FinTech ecosystem through Copenhagen FinTech</li> <li>Access to international FinTech companies</li> </ul>	<ul> <li>2,000 square metres of space</li> <li>Houses over 170 start-ups</li> <li>Established 2016</li> </ul>



Name	Location	Type of facility	Target market	Description	Services	Size and date of establishment
				network through Rainmaking's Startupbootcamp network as well as their Nordic network of FinTech hubs in Oslo, Helsinki and Stockholm.		
Boston FinTech Sandbox	Boston	Accelerator (programme, not physical space)	Aimed at FinTech start-ups	The focus of the FinTech Sandbox is on the provision of a six month programme of free data to start-ups who would not otherwise be able to afford it. The Sandbox is not an incubator, and does not offer physical space. Despite being based in Boston, applications are welcome from a number of locations - Boston, New York, Chicago, the San Francisco Bay Area, London, and Canada. As well as data, the Sandbox also offers a free computer infrastructure and platform service and up to \$15,000 in credits per start-up to Amazon Web Services plus Business-level AWS Support up to \$5,000 per start-up.	<ul> <li>Access to Financial Services companies through network</li> <li>Events and mentorship through network</li> </ul>	Established 2015     Supported over 100 start-ups as of January 2018
B-Hive	Brussels	Accelerator (programme, not physical space)	Aimed at start-up or scale-up FinTech companies	B-Hive is a European collaborative innovation FinTech platform that looks to bring together the existing Financial Services industries and emerging FinTech companies. Through its strategic programmes B-Hive brings together members from Financial Services companies and FinTechs to develop innovative solutions to key challenges. Start-up/scale-up FinTech members also gain	Access to global network of Financial Services companies and FinTechs     Opportunity to participate in workshops and strategic development programmes     Access to FinTech events	Established 2017



Name	Location	Type of facility	Target market	Description	Services	Size and date of establishment
				access to B-Hive's global network, which includes hubs to promote European Fin-Tech in Brussels, London, Tel Aviv and New York.		
Level 39	London	Incubator	Aimed at start-up Tech companies	Level 39 is a Tech start-up incubator, owned by the Canary Wharf Group. Since launching in 2013 it has grown a three floor, 80,000 square metre space within Canary Wharf. Level 39 provides support to fast-growth Tech companies across a number of areas, including FinTech, Cybersecurity and RegTech. Although given its location at the heart of London's Finance sector, there is a particular concentration of FinTech start-ups.	Office space within Canary Wharf     Access to talent and customers     Mentorship     Networking events	<ul> <li>Established 2013</li> <li>80,000 square metre space</li> <li>Approximately 200 companies are based at Level39</li> </ul>
Accelerate Places	London, Nottingham and Manchester	Co-working space	Cross-sectoral, aimed at start-up and scale-up businesses	Accelerate Places is a series of city centre based co-working spaces. The focus is offering a community of start-up and scale-up businesses within high spec offices in order to support development. Accelerate Places also offer flexible terms.	<ul><li>Co-working space</li><li>Office services</li><li>Social and learning events</li></ul>	Established 2012
WeWork	Global	Co-working space	Cross-sectoral, aimed at companies of a range of sizes.	WeWork is a global network of co-working spaces. The focus is on design led, dynamic spaces that can encourage new ways of working and build communities of businesses. By offering an excellent environment WeWork looks to support recruitment,	<ul><li>Co-working space</li><li>Office services</li><li>Events</li></ul>	Established 2010



Name	Location	Type of facility	Target market	Description	Services	Size and date of establishment
				retention, innovation and productivity.		
Dogpatch Labs	Dublin	Incubator	Aimed at start-up Tech companies	Dogpatch Labs is a start-up hub for Tech companies. Having first opened in 2011 on an invite only basis, in 2015 it changed to a new "pay to play" policy and Dogpatch Labs has now expanded to premises over three floors and is home to 45 companies. As well as offering incubation facilities to start-ups, Dogpatch Labs looks to act as a wider hub for the Tech and start-up communities through the provision of events and workshops and support for start-up micro communities across Ireland. Dogpatch Labs also has a number of major partners including Google and Ulster Bank, that deliver support, events and networks to tenants.	<ul> <li>Co-working space</li> <li>Access to support from partners</li> <li>Learning and networking events</li> <li>Access to investors</li> </ul>	Established 2011     Based over three floors, home to 45 companies
MaRS	Toronto	Accelerator programme	Aimed at companies within the following sectors: Energy & environment Health Finance & commerce Work & learning There are three different	MaRS is a series of accelerator programmes aimed at companies at varying stages of growth. Successful applicants gain access to different services based on the programme they are participating in, but the focus is on mentorship, access to networks of investors and customers, support with awareness raising, recruitment support and support with export markets. MaRS also works with key stakeholders to deliver a number of programmes and	<ul> <li>Mentorship</li> <li>Access to networks of investors and customers</li> <li>Support with recruitment</li> <li>Support with awareness raising</li> <li>Support with export markets</li> <li>Office space (prioritised for growth stage companies)</li> </ul>	Founded 2000     Currently working with over 1,200 ventures



Name	Location	Type of facility	Target market	Description	Services	Size and date of establishment
			programmes (start- up, growth stage and scale-up) aimed at companies at different stages.	initiatives across a range of sectors that are aimed at promoting social impact and opening up market access for venture clients.		
IA Velocity	London	Accelerator	Aimed at FinTech companies working within assets management and capital markets industries. Typicall companies will be less than three years old and have fewer than 20 employees.	Velocity is a FinTech accelerator ran by the Investment Association (IA). Velocity is a six month programme offering mentoring, online resources, marketing, branding, advice, events and office space to successful applicants. It will be running for the first time from October 2018. In order to apply applicants must first become members of IA FinTech. Membership offers access online resources, events and training and other industry briefings. It also means companies will be included within the Velocity website.	<ul> <li>Co-working office space</li> <li>Mentoring</li> <li>IA online resources</li> <li>IA briefing/surgeries</li> <li>Branding</li> <li>Talks and events</li> <li>Industry and regulatory surgeries</li> <li>Expert consulting and legal advice</li> </ul>	Starting October 2018

