# Landscaping UK Fintech Commissioned by **UK Trade & Investment UK Trade** & Investment Building a better working world

### **Foreword**



Sue Langley Chief Executive Officer

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**UKTI Financial Services Organisation** 

Technology applied to financial services (Fintech) has a significant impact on our daily lives, from facility payments for goods and services to providing the infrastructure essential to the operation of the varid's financial institutions.

As the world's leading financial centre, the UK is fast becoming a destination of choice for companies wanting to establish a global presence in the Fintech sector, with leading international companies in the Like choosing to have a base in the UK whilst at the same time providing a fertile environment for start-ups and of appreneurs.

The UK Government is committed to supporting Fintech companies; creating jobs and growth as well as further strengthening our position as the world's pre-eminent financial services destinated. Vorking with colleagues across government, UK Trade & Investment (UKTI) are leading efforts to at a programment investment to the UK's Fintech sector and support UK-based Fintech companies seek to the vernationalise their business and services.

In order to better inform our strategy to meet these objectives. UKTI a mmissioned EY to produce a report on the UK Fintech sector. It is intended to help us map out the fine h landscape; to create a recognised taxonomy; and highlight important growth trends, drivers and barrers.

We have taken the step of publishing excerpts of this report or the wider Fintech community as we believe financial technology businesses, investors and regulators will all benefit from increased research and transparency on this increasingly important, irreportive and fast growing sector.

This report has provided valuable insight and elped shape our strategy for developing and promoting this sector in our bid to assist more companies located to establish a presence in the UK; and help both indigenous and foreign owned UK companies lever apportunities internationally.

### **Executive summary**

- UK Fintech is currently energised by the cumulative effect of digital connectivity, customer dissatisfaction with banks, and a lack of innovation and investment by incumbent providers.
- ➤ We estimate the Fintech market (as defined in the scope agreed with UKTI) to be worth c. £20bn in annual revenue and growing, the majority of which is generated by what we term Traditional Fintech and in the order of 18% is generated by Emergent Fintech.
- We describe Traditional Fintech as 'facilitators' (larger incumbent technology firms supporting the financial services sector) and Emergent Fintech as 'disruptors' (small, innovative firms disintermediating incumbent financial services firms with new technology). The UK is poorly represented in Traditional Fintech (four out of the top 100 globally), but is strong in Emergent Fintech (one half of all promising start-ups in Europe).
- ➤ The key themes affecting the sector are the disintermediation of incumbent models, the disintermediation of incumbent infrastructure, the monetisation of data, and the requirement for fraud and identity protection.
- We have categorised the Fintech space into Payments (c. £10bn), Software (c. £4.2bn), Data and Analytics (c. £3.8bn) and Platforms (c. £2.0bn).
- The highest growth areas are peer-to-peer platforms, online payments and the data and analytics products and insurance which together represent c. 60% of the sector.
- We believe the UK has an international many that adership position in peer-to-peer platforms, against tor platforms, and the data and analytics products. Two prier hally attractive areas where the UK could build an aternational market leadership position are risk products. The priest ent/compliance/fraud software and online payment.

- Much of Emergent Fintech is focused on a small number of sectors (for example peer-to-peer platforms, payments, capital markets), however we believe there is a huge amount of white space open to disruptive and innovative models, particularly in the middle and back office of insurers and banks.
- We believe the UK scores highly as an attract of a tion for global Fintech. The size of the market of artunit, in the UK is significant due to a large indigenous and a chnologically sophisticated customer base, and near don's position as a world leading centre for institute all blancial services. The UK also scores highly the attraction and the availability of capital which is sufficient for the sector anough there are gaps at the development capital and at the IPO stage. Interviewees commented favourably in supporting factors including the UK's regulatory approach financial services infrastructure and London's results as a global trading hub. Three of our interview is halo ocated their businesses to London due to the other trading the market.
- Our interviews suggested the UK government should insider additional actions to support the Fintech community particularly in the areas of improving access to talent; couraging closer collaboration and information sharing between established financial services businesses and Emergent Fintech; and actively championing the sector. We believe the government should also take a leadership role in setting the agenda on data/privacy protection as this will increasingly become a central pillar of the financial services marketplace and critical in enabling the Fintech sector to operate and prosper.

# Unique factors are driving the financial technology sector



#### Recent changes in UK market dynamics

#### Digital connectivity

Smartphone and internet penetration have revolutionised consumer connectivity allowing consumers and as assess to connect in ways previously unimagined. Many the econnections have financial components. The K has one of the highest levels of internet and mobile phone per ration globally, highest e-commerce spend in Europe and a leader in online access to financial services.

#### **Economic downturn**

Consumer sentiment plum neted post-crisis globally and has continued to remain low in the UK, while recovering in other European countries this has breated an environment whereby the UK consumer of particular dopting new business models and products from the products. At the same time, the crisis has meant in the characteristic than astitutions have failed to invest in technology and innovation.

#### egu fory changes

An age of new regulation introduced in recent years has mpted financial services industry players to monitor their activities more stringently. This, in turn, has created demand for a range of new and innovative solutions. The UK regulator has also been dynamic in their approach by keeping an open mind and engaging closely with innovators.

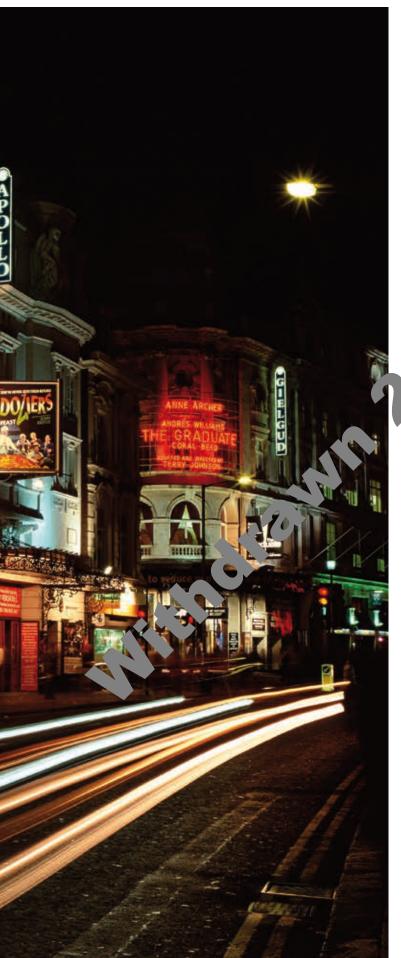
Changes in market dynamics have led to the UK becoming a leader in the financial technology industry, with London being the ultimate capital.

# Traditional vs. Emergent Fintech

We observe both Traditional and Emergent models in the UK Fintech sector, with the key aspects of both summarise below.

|                | Traditional   | Emergent  |
|----------------|---|---|
| Positioning    | <ul> <li>Market players are generally perceived as facilitators which are typically large, incumbent technology vendors supporting the financial services sector.</li> <li>For example: Fiserv, SunGard, Infosys, FirstData.</li> </ul> | <ul> <li>Market players are disruptors and innovators, mature.         They are disintermediating incumbent finatoric rivices firms or provide new technology solutions to service existing needs.     </li> <li>For example: Zopa, Fidor Bank, Transprwise.</li> </ul>                             |
| Infrastructure | Companies focus on the support, maintenance and<br>provision of the existing infrastructure.  | <ul> <li>Two operating models have the perged of either utilising existing infrastructure which hads to be controlled by established players of by replacing them completely.</li> <li>The replacement asstructure is a high risk strategy, however, process high returns if successful.</li> </ul> |
| Revenue model  | <ul> <li>Operate under established revenue models that tend<br/>to use cost per transaction, percentage of assets or<br/>license fees.</li> </ul>   | Emerging evide models are broad and tend to function is a multiple different types of revenue stream including divertisement and the monetisation of data.  |
|                |   |   |

## **Emergent themes in the Fintech sector**



A number of common themes are evident across the sector.

#### Monetisation of data

Fintech is fundamentally changing the way consumers pay for financial services. There is a shift away from pair so criptions or free float revenue models to alternative mode chased on advertising and monitoring or reselling of doubto the aparty companies. This is due to the richness of data accinancial services and the emergence of a sop istrated and liquid market for digital leads. This is an important the pair of the government to focus on and help to steer debress round consumer protection and privacy.

#### Fraud and identity protection

The connected work overy implicated making protection of personal fit and all terrals more challenging. As emergent Fintech and to about providers rush into the space with new and the providers security is often a secondary focus. We expect significant amount of activity in this sector from providers.

#### In ructure replacement

most radical Emergent Fintech players are frustrated with existing infrastructures and are completely circumventing it. This includes the peer-to-peer networks as well as cryptographic currencies such as Bitcoin. Historically this strategy has produced multinational winners in Fintech including Visa, Mastercard and Square, and is the backdrop to the phenomenal success of M-Pesa in Kenya. At the margin some established Fintech are seeking to deliver a step change in legacy infrastructure through the development or acquisition of infrastructure accelerators.

#### Disintermediation

Emergent Fintech is disrupting business models and working around incumbent financial service providers, most visibly in peer-to-peer lending. We see mainstream consumers willing to use the players without the traditional barriers of trust, credibility, familiarity and scale impeding uptake.

### Sizing the UK Fintech market

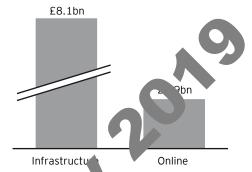
Based on an approximate and top down view of the UK Fintech sector we believe the industry currently generates c. £20bn in revenue annually.

#### **Payments**

Payments is the largest microsector and based on the level of innovation and scale could be broadly spilt into infrastructure and online segments.

The former is dominated by well established and large players with business models based on economies of scale. The latter has seen the largest number of new entrants and remains fragmented. Most successful players are those that have been able to grow adoption internationally.

#### Payments, £10bn

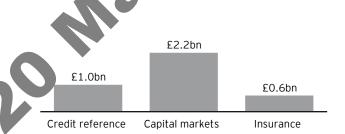


#### Financial data and analytics

Successful business models in this microsector rely on economies of scale and ability to collect a diverse range of financial data on individuals, corporates and particular market activities (e.g., trading). We grouped market players based on the type of data into:

- Credit reference
- Capital markets
- Insurance data analytics

#### Financial data are an ties, £3.8bn

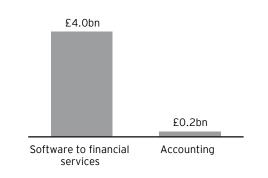


#### Financial software

The microsector is dominated by large interactional technology companies who are mostly headquartered to the UK and offer a range of solutions to financial stitutions that include:

- Risk management
- Payments software
- Core banking, insurance asset management and capital market software
- Accounting ftw.

#### Financial software, £4.2bn



#### **Platforms**

The platforms microsector dynamic varies significantly depending on the market segment and include:

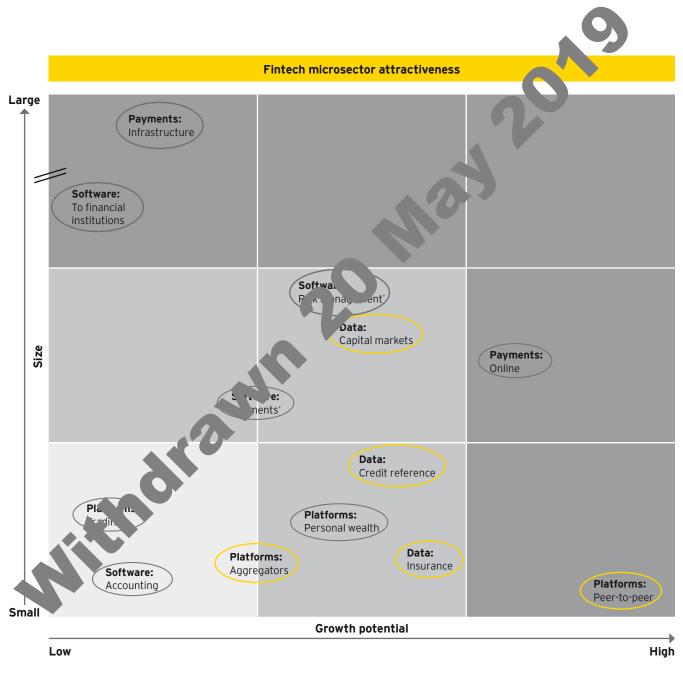
- Peer-to-peer platforms
- Trading platforms
- Personal wealth platforms
- Aggregators

#### Platforms, £2.0bn



### Fintech micro sector attractiveness

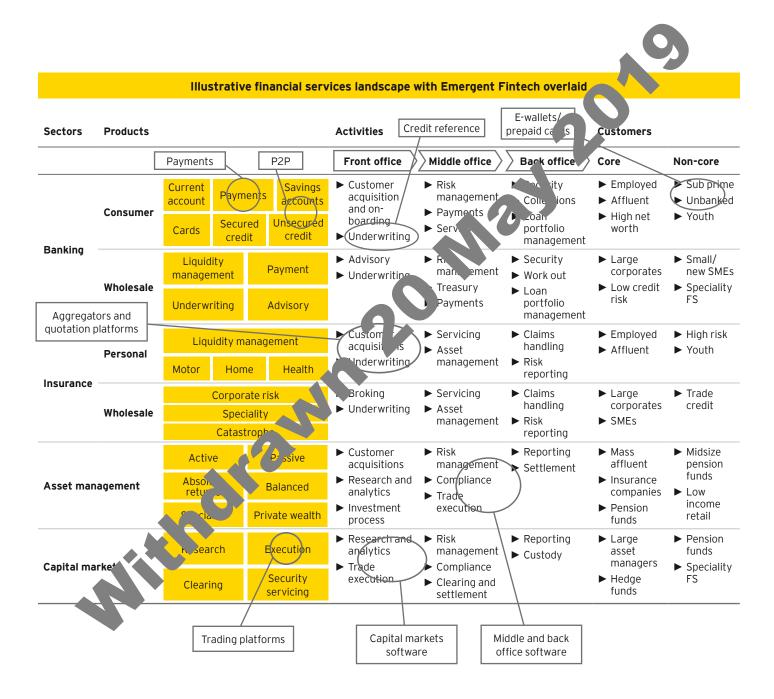
We set out below our Fintech microsector attractiveness matrix highlighting current size and future growth potential.



= UK market leadership position
\*Illustrative market size

# White space opportunities for disruptive Emergent Fintech businesses

The schematic below highlights areas where existing disruptive Fintech is focussed and also highlights the white space for further innovation.



### Attractiveness of the UK market

The UK market is one of the most attractive markets in Europe based on our analysis of market opportunity, availability of capital and regulatory environment.

### We have separated our analysis of the attractiveness of the UK market into:

- Fundamental drivers which reflect the market opportunity in the UK and the availability of capital; and
- Supporting factors which include a wide range of factors that encourage firms to adopt the UK as a centre of business.
- We found that the UK, and London in particular, performs well across a number of aspects due in part the absolute size
- of the market opportunity for financial services in the UK, the quality of infrastructure and the regulatory context.
- We believe the UK scores less well in terms (availability of capital (good versus Europe but poor versus (e.g., S) and also on tax and grants, not because (UK is not generous, but rather foreign competitors are more generous (e.g., Singapore).

#### Fundamental drivers

#### Market opportunity

- Large and sophisticated consumer market open to innovation.
- London has the highest concentration of global financial institutions across banking, capital markets, insurance and asset management in the world.

#### Availability of capital

- Significantly ahead of the rest of Europe bare is a fundamental gap in comparison with an 'S.
- Nonetheless good businesses are idea are funded by international capital.
- ► The gaps are in developm The gaps are in developm PO capital.
- Good support for an (in stment offset by a risk-averse investment cult

#### Supporting factors

#### Regulator pro



ould be more approachable.

#### Talent



- Access to high quality financial services talent.
- Dependant on importing technical talent.

#### Tax and grants



- Good angel investor support but no company help.
- Foreign grants can be very generous.

#### Infrastructure



- World class financial services infrastructure.
- Banks often restrict access.

#### Culture and position



- ▶ London is open, welcoming and has a mercantile culture.
- ▶ London is perceived as a hub for launching into EMEIA.

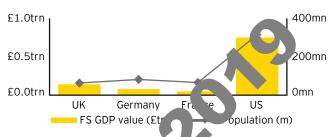
# Fundamental drivers: attractive consumer market

The UK market has a large and sophisticated consumer base with world leading mobile and internet penetration and is open minded to innovative products from new providers.

#### High level of aggregate financial services activity

The UK financial services sector is one of the largest globally, representing approximately 9.4% of GDP.

#### Population by country and value of financial services



Source: World Bank, United States Census

#### Openness to adopting new models

The UK has been an early adopter of a large number of innovative business models (for example, aggregators and DIY investing), particularly those offering:

- Lowest upfront cost
- Internet delivery
- Greater convenience

#### Consumer e-commer d per capita



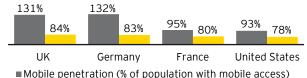
Source: IMRG X-border Training Guide 2013m Population figure obtained from ATE/Industry data and Ofcom

#### World leading level of mobile and internet penetration

The ability to access online services and an active of economy is key to Fintech adoption.

The UK has one of the highest levels of mount and internet penetration globally.

#### Mobile and internet penetration, % of population



Internet penetration (% of population with Internet access)

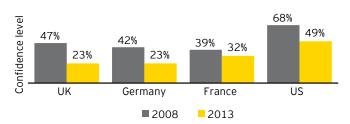
Source: Mobile penetration ITU International, internet penetration World Stats

#### Increasing promps, to switch providers

Historically, he hary brake on innovation in financial services has been a round switching providers.

There was a significant drop in confidence in the banks following the financial crisis which, to date, has still not returned, leading to consumer willingness to try alternative providers.

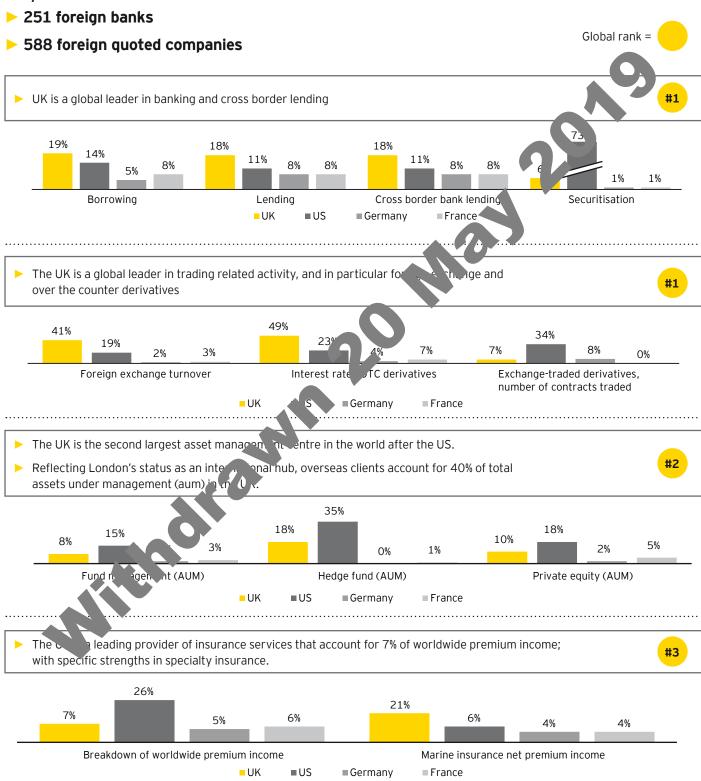
#### Level of confidence in banks



Source: Edelman Trust Barometer

# Fundamental drivers: leading international financial services centre

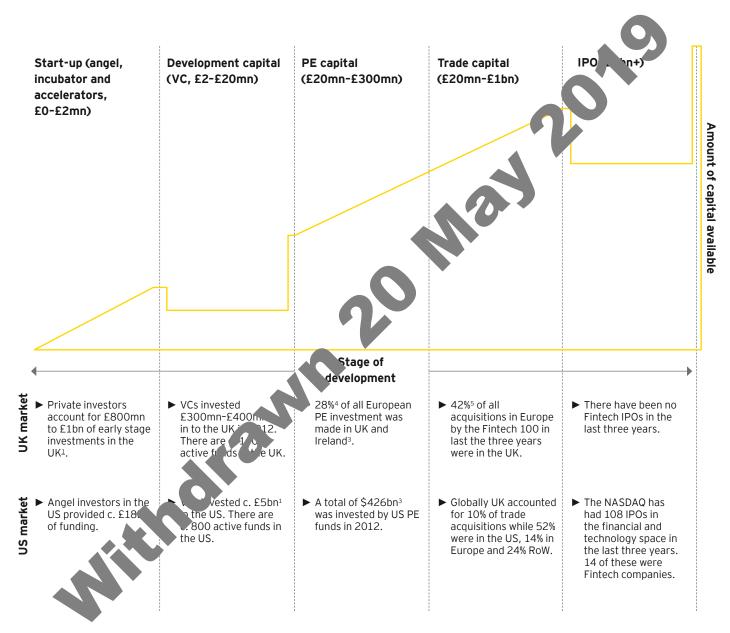
London is one of the world's largest financial institutions centres and unlike some peers serves a truly international client base:



Source: BIS and The City UK

# Fundamental drivers: availability of capital

The schematic below maps the stages of a company's development to the availability of capital in the UK market. UK companies have good access to capital, however, there are weaknesses at the development and IPO stages relative to the US.



Source: EY analysis

Source: ¹UK Business Angels Association; ²NVCA year book 2013; ³BVCA; ⁴Private equity growth capital council; ⁵European Venture Capital Association, 2012; ⁶Mergermarket/Capital IQ.

# Appendices



# Segmentation of the UK financial technology market

Financial technology microsegments can be divided into several key market segments.

| Payments               |  |                 |  |  |  |
|------------------------|--|-----------------|--|--|--|
| Market segment         |  | Est. 1a. + size |  |  |  |
| Infrastructure         | Market players include operators of national payment infrastructures, cards schemes, issuers, processors and merchant acquirers. The segment is dominated large established players, however, new infrastructure solutions are emerging.                       | £8.1bn          |  |  |  |
| Online payments and FX | This segment is highly fragmented and diverse and includes e-wallets, B2B at 2P payment providers, payment gateways, virtual terminals and online money train for this segment has seen a significant amount of innovation, changing the way we make payments. | £1.9bn          |  |  |  |

| Credit reference Credit reference and data analysis aims to be any the credit worthiness of companies and individuals. Increased at to ation of this segment is leading to new software solutions emerging.  This market has traditionally been laminated by large capital market players. However new entrants are emening with some reaching significant scale by utilising data analysis opportunities in the ausly unexplained areas of the market.  Insurance data analytics in the players are increasingly embracing new technology solutions and the more accurately. Insurance innovation is anticipated.  Est. market size (revenue)  £1.0bn  £2.2bn | Data and analytics |  |        |  |  |
|--|--------------------|--|--------|--|--|
| Credit reference companies and individuals. Increased a to ation of this segment is leading to new software solutions emerging.  This market has traditionally beer comminated by large capital market players. However new entrants are emocying, ith some reaching significant scale by utilising data analysis opportunities in the cously unexplained areas of the market.  Insurance data analytics in the cously unexplained areas of the market.  Insurance data analytics in the cously unexplained areas of the market.  Insurance data analytics in the cously unexplained areas of the market.  E0.6bn  | Market segment     |  |        |  |  |
| However new entrants are emcong ith some reaching significant scale by utilising data analysis opportunities in the Justy unexplained areas of the market.  Insurance data analytics in the Justy uses data to better understand risk and price it more accurately. Insurance market players are increasingly embracing new £0.6bn   | Credit reference   | companies and individuals. Increased to at on of this segment is leading to new    | £1.0bn |  |  |
| Insurance it more accurately. Insura. market players are increasingly embracing new £0.6bn   | Capital markets    | However new entrants are emcoing with some reaching significant scale by utilising | £2.2bn |  |  |
|  | Insurance          | it more accurately. Insura market players are increasingly embracing new           | £0.6bn |  |  |
|  |                    |  |        |  |  |

# Segmentation of the UK financial technology market (continued)

Financial technology microsegments can be divided into several key market segments. (cont'd)

| Financial software market                  |  |  |
|--|--|--|
| Market segment                             |  | Est. 10 t size   |
| Risk management                            | Financial services institutions have to manage a range of internal and external risks, with regulatory pressure on effective monitoring increasing continuously. The increase in global connectivity creates new risks leading to a wide range of n innovative solutions emerging.   |  |
| Payments                                   | Evolving needs of rapidly developing and changing payments industry (e.g., on banking, regulatory changes) has created a demand for new solutions which ar being offered by new entrants and innovators.   |  |
| Banking                                    | The market is dominated by well established technology vendors. The a speen a limited amount of innovation due to high costs of switching ar a spinal se of the encumberent players.   | Market size for all<br>software excluding<br>accounting - £4bn |
| Asset<br>management and<br>capital markets | The market is highly fragmented with a large number of the back office solutions offered by international and local providers. The asset and Jement and capital markets industry has been impacted by the financial crisis and regulatory changes, encouraging incumbent players to improve their the hnology, utilise data, and automate compliance monitoring, which this to rive further innovations. | accounting - £40N  |
| Insurance                                  | The market is fragmented and represence operage international software vendors. Traditionally, the insurance industry has to an a conservative approach to technology adoption creating an opportunity for potential innovators to enter the sector.   |  |
| Accounting                                 | The UK has a market leadership ostpon in Europe in this segment with new opportunities emerging whele providers starting to take advantage of new technologies and connecting  | £0.2bn   |

| Platforms                   |   |                            |  |  |  |
|-----------------------------|---|----------------------------|--|--|--|
| Market segment              |   | Est. market size (revenue) |  |  |  |
| Peer 2 Peer (?F)<br>lending | The arms 'peer to peer lending' and 'crowd funding' describe a variety of new, ect financial models that connect lenders and borrowers, investors and investee companies. The UK is a market leader in Europe. It is estimated that in 2013 c£1bn of funding was committed through P2P platforms. This sector is widely expected to grow significantly in the coming years. | <£50mn                     |  |  |  |
| Trading platforms           | Trading platforms cover a broad range of unregulated trading venues including multilateral trading facilities and systematic intermediaries.  | £0.8bn                     |  |  |  |
| Personal wealth             | Personal wealth platforms comprise intermediary, direct to consumer and corporate platforms. Disruptive technologies are evolving fuelled by the high levels of wealth available requiring advice, offering strong growth opportunities to potential investors.   | £0.7bn                     |  |  |  |
| Aggregators                 | Aggregators have become a major distributor for a variety of financial products. The UK has established itself as a market leader in this segment.  | £0.5bn                     |  |  |  |







