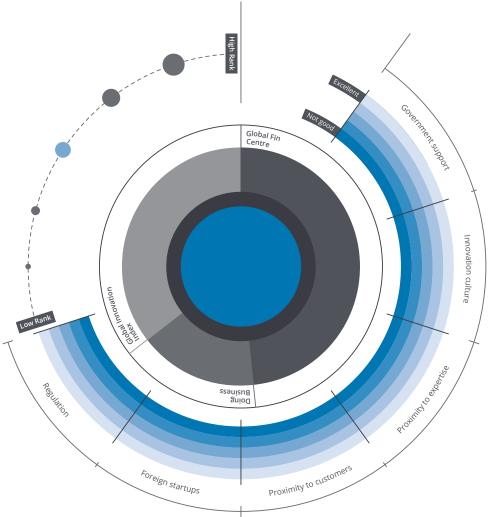
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An initiative supported by Innotribe and Innovate Finance



A tale of 44 cities

Connecting Global FinTech: Interim Hub Review 2017

Published by Deloitte April 2017

"We want to encourage global engagement, best practices, and knowledge sharing, as well as build bridges between all FinTech hubs for entrepreneurs and investors to connect."

Global FinTech Hubs Federation

Contents

| Connecting the global | | – Copenhagen | 34 | – Bangalore | 76 |
|-----------------------------|----|----------------|----|-------------------|-----|
| FinTech community | 04 | – Edinburgh | 36 | – Brussels | 78 |
| Readers' note | 06 | – Istanbul | 38 | – Dublin | 80 |
| Methodology | 07 | – Jakarta | 40 | – Frankfurt | 82 |
| Reading guide | 13 | – Kuala Lumpur | 42 | – Hong Kong | 84 |
| | | – Lagos | 44 | – Johannesburg | 86 |
| Research findings | 14 | – Lisbon | 46 | – London | 88 |
| Overview – Index | 47 | – Madrid | 48 | – Luxembourg City | 90 |
| Performance Scores | 17 | – Manama | 50 | – Mexico City | 92 |
| Overview – Hub Indicators | 18 | – Milan | 52 | – Nairobi | 94 |
| Global FinTech VC deal | | – Moscow | 54 | – New York | 96 |
| value 2016 | 19 | – Oslo | 56 | – Paris | 98 |
| Map of regulatory sandboxes | 20 | – Prague | 58 | – Shanghai | 100 |
| Map of regulatory | | – Sao Paulo | 60 | – Silicon Valley | 102 |
| collaboration | 21 | – Shenzhen | 62 | – Singapore | 104 |
| New Hubs | 22 | – Stockholm | 64 | – Sydney | 106 |
| – Abu Dhabi | 24 | – Taipei | 66 | – Tel Aviv | 108 |
| – Auckland | 26 | – Tokyo | 68 | – Toronto | 110 |
| – Bangkok | 28 | – Warsaw | 70 | – Zurich | 112 |
| – Budapest | 30 | Old Hubs | 72 | Acknowledgements | 114 |
| – Chicago | 32 | – Amsterdam | 74 | | |



Connecting the global FinTech community



Fabian Vandenreydt Global Head of Securities Markets, Innotribe & The SWIFT Institute, SWIFT



Lawrence Wintermeyer CEO, Innovate Finance

An update to the report Connecting Global FinTech: Hub Review 2016 where 21 emerging and established global FinTech Hubs were profiled.

This interim report updates 20 of the Hubs profiled in September 2016 and introduces an additional 24 Hubs that have joined the Federation, bringing the number total number of Hubs profiled to 44.

We have been overwhelmed by the response of the global FinTech community and their desire to collaborate and connect with each other to share best practices and knowledge through the Global FinTech Hubs Federation.

We welcome members of the Federation to the Innovate Finance Global Summit at London's Guildhall on 10 and 11 April 2017.

The next full report will be published in the autumn and be presented at Sibos 2017 where we will welcome all of the members of the Federation to Toronto.

We would like to thank Deloitte for their continuing support and contribution to making this report the global FinTech hub report.

We look forward to meeting and working with all of the hubs in the Federation in 2017.

Fabian Vandenreydt, Global Head of Securities Markets, Innotribe & The SWIFT Institute

Lawrence Wintermeyer, CEO, Innovate Finance





The Global FinTech Hubs Federation (GFHF) is an independent and inclusive network of emerging and established FinTech hubs. As the FinTech sector develops globally, it is creating a growing international community helping to foster innovation across the world's financial services industry. The Global FinTech Hubs Federation is bringing together FinTech hubs to provide a neutral, crossborder platform to encourage greater collaboration, engagement and knowledge sharing in this growing global community. Launched in 2009, Innotribe was created to identify the emerging technologies and innovative trends surrounding the financial services industry and generate discussions on their potential impact moving forward. Benefiting from SWIFT's central position, Innotribe provides a platform to the global financial community to understand the dynamics behind technology changes and to help focus on the opportunities for transformation rather than the threats to current market practices.

Deloitte.

Deloitte is the largest privately held professional services organization in the world based on headcount and breadth of capability, delivering audit, enterprise risk, tax, finance, strategy and operations, human capital, and technology services.



Innovate Finance is an independent, not-for profit membership association that represents the UK's global FinTech community. Founded in 2014 with support from the City of London and Canary Wharf Group and with over 250 members, Innovate Finance aims to accelerate the country's leading position in the global financial services sector by directly supporting the next era of technology-led FinTech innovators. The goal is to create a single point of access across sectors to help foster enabling policies, regulation, and investment.



Interim report : new Hubs, same methodology

Since our inaugural report was launched at Sibos 2016, the number of participants in the Global FinTech Hubs Federation has more than doubled. This is a great success for the Federation and to recognise this significant growth, the Federation has asked Deloitte to help them create a one-off Interim report to showcase the 24 New Hubs.

In reading this report, readers should note that the analysis is split into two parts:

i. Index Performance Scores:

We took the combined scores of each Hub from three prominent business indices (the World Bank Doing Business Index, the Global Innovation Index and the Global Financial Centres Index) to provide a consolidated "Index Performance Score" in order to assess the Hubs on a quantitative basis. A lower Index Performance Score is expected to be more conducive to the growth of FinTech.

However, readers should note that Index Performance Scores are not rankings. There are limitations of using Index Scores, and these are set out in the Methodology section. For example, four Hubs (Auckland, Bangalore, Lagos and Nairobi) are not currently included in the Global Financial Centres Index and therefore have an Index Performance Score marked "n/a".

ii. Hub Indicators:

Hub Representatives were asked to provide a self-assessment of their Hub based on six categories and provide a broad overview of their Hub, including the top innovation areas and challenges, top FinTech companies, investors and others. Readers should note that while not all Hub Representatives in the 2016 report were GFHF participants, all Hub Representatives in the 24 New Hubs are GFHF participants and this is reflective of the ambition for future reports. This report uses the same research methodology as the Connecting Global FinTech: Hub Review 2016 report. Full details of this, including how Hubs and Hub Representatives were selected, can be found in the Methodology on pages 7-12.

For the 24 New Hubs that are the focus of this Interim report, we have completed the full research approach set out in our methodology. However, for Hubs previously profiled in the 2016 report, we have limited the updates to Index Performance Scores and corrections which did not make it into the previous report.

Our ambition for future reports

In FinTech, a lot changes over six months. When we launched our Connecting Global FinTech: Hub Review 2016 at Sibos last year, it was the first report globally that attempted to score 21 international FinTech Hubs. At the time, and arguably still, there were no comprehensive FinTech measures that could be used to objectively benchmark global Hubs and track progress over time.

As the industry continues to mature, and national governments, regulatory and FinTech bodies start to publish more data regarding its impact, our ability to better measure and track progress across Hubs has the potential to become more sophisticated and this can then be reflected in our analysis.

Deloitte are excited to support the Global FinTech Hubs Federation in creating a set of qualitative and quantitative measures that will underpin future reports and better capture the intricacies and complexities of each Hub. We have gathered the lessons learnt from our 2016 report and are already assimilating a list of refinements that we look forward to sharing with you in the next Sibos report.

The 2016 Hub profiles have been included at the end of this report. These have been included for reference only as the self-assessment and narrative data may now be out of date. We will conduct a comprehensive refresh of all Hubs as part of the full report being published at Sibos in October 2017.

(1) Methodology

The Connecting Global FinTech: Hub Interim Review 2017

is published by Deloitte in collaboration with the Global FinTech Hubs Federation and builds on the initial analysis and research undertaken for the Connecting Global FinTech: Hub Review 2016. The report takes into account both hard and soft data to compare the status of 44 global hubs ("Hubs") on the basis of the FinTech sector development in that location. The methodology for the FinTech Hub comparison is comprised of three sections: Hub and Hub Representative Selection Index Performance Score and Hub Indicators.

For the Hubs featured in the original Connecting Global FinTech: Hub Review 2016 report, we updated the Index Performance Scores with recent data. However, the self-evaluation and narrative data remain largely unchanged, except where Hub Representatives have changed.

For the 24 New Hubs, the full research was completed based on the methodology below.

Future reports will include a refresh of the full dataset.

Section 1. Hub and Hub Representative Selection

1.1. Hub Selection

Hubs (locations) profiled in this report were selected by the GFHF and are based on cities where GFHF participants are located. (*Example: Copenhagen FinTech is a Copenhagen-based GFHF participant, and therefore Copenhagen is included as a Hub in this report.*)

Note that since the research cut-off date for this Interim report, the locations covered by GFHF participants have expanded to include Dubai and Charlotte (North Carolina). These Hubs will be included in the October 2017 edition of the report.

1.2. Representatives Selection

Hub Representatives were selected by the GFHF to provide insights and knowledge on local FinTech markets and trends. These parties are all heavily integrated in their local FinTech ecosystems and play an important role in developing FinTech in their Hub.

As contributors to the Connecting Global FinTech: Hub Review report, Hub Representatives have a responsibility to provide a balanced and unbiased overview of FinTech developments, strengths and challenges within their Hub.

As the GFHF was still in its infancy when the inaugural report was launched, a broad spectrum of ecosystem participants, ranging from industry bodies to regulators and professional services firms, were invited to contribute to the Connecting Global FinTech: Hub Review 2016 as Hub Representatives. (*Example: Deloitte Ireland is not a participant of the GFHF but was asked to contribute towards the inaugural report as the Hub Representative. In the next full version of the report, a GFHF participant will replace Deloitte as the Hub Representative for Ireland.*)

However, as the GFHF develops and its network of participants expands, the intention is to shift the roles and responsibilities of Hub Representatives to GFHF participants. For example, Hub Representatives selected for the "New Hubs" in this Interim report are FinTech associations and bodies who are also participants of the GFHF.

Deloitte has no influence over the selection of the Hub Representatives.

1.3. GFHF Participants

Under current guidelines, independent FinTech ecosystem facilitators such as associations, industry bodies and organisations who play a role in connecting FinTech startups, investors, institutions, policymakers and regulators are open to join the GFHF and become participants.

The current list of participants, and criteria for joining the Federation, can be found on the GFHF's website at: **thegfhf.org**

1.4. List of Selected Hubs and Hub Representatives 2016 Hubs ("Existing Hubs")

| Hub | Hub Representative |
|-----------------|--|
| Amsterdam | Holland FinTech |
| Bangalore | Nathan Associates India [NOTE 2] |
| Brussels | B-Hive (formerly Eggsplore) |
| Dublin | Deloitte Ireland [NOTE 2] |
| Frankfurt | Frankfurt Main Finance [NOTE 1] |
| Hong Kong | FinTech HK |
| Johannesburg | Techstars [NOTE 2] |
| London | Innovate Finance |
| Luxembourg City | Luxembourg for Finance |
| Mexico City | FinTech Mexico |
| Nairobi | NEST Nairobi |
| New York | Partnership Fund for New York City |
| Paris | Paris FinTech Forum |
| Seoul | Deloitte South Korea ^[NOTE 3] |
| Shanghai | Association of Shanghai Internet Financial Industry (ASIFI) [NOTE 1] |
| Silicon Valley | 500 Startups [NOTE 2] |
| Singapore | Monetary Authority of Singapore [NOTE 2] |
| Sydney | Stone & Chalk |
| Tel Aviv | Startup Nation Central |
| Toronto | MaRS Discovery District [NOTE 1] |
| Zurich | Swiss Finance + Technology Association |

Note 1: Hub Representatives changed since 2016 report

Note 2: Proxy representative until a GFHF participant is selected to be the Hub Representative

Note 3: Seoul (South Korea) has been excluded from this Interim report as there is currently no GFHF participant in this location.

Interim 2017 Hubs ("New Hubs")

| Hub | Hub Representative |
|--------------|--|
| Abu Dhabi | Abu Dhabi Global Market |
| Auckland | FinTech NZ |
| Bangkok | Thai FinTech Association |
| Budapest | CEE FinTech |
| Chicago | FinTEx |
| Copenhagen | Copenhagen FinTech |
| Edinburgh | FinTech Scotland (steering committee) |
| Istanbul | FinTech Istanbul |
| Jakarta | FinTech Association of Indonesia |
| Kuala Lumpur | FinTech Association of Malaysia |
| Lagos | FinTech Association of Nigeria |
| Lisbon | Associação FinTech e InsurTech Portugal |
| Madrid | Asociación Española de FinTech e InsurTech |
| Manama | Economic Development Board of Bahrain |
| Milan | SellaLab |
| Moscow | Skolkovo FinTech Hub |
| Oslo | IKT-Norge |
| Prague | Czech FinTech Association |
| Sao Paulo | Fintech Committee at ABStartups |
| Shenzhen | Silk Ventures |
| Stockholm | Stockholm FinTech Hub |
| Taipei | FinTechBase |
| Токуо | FinTech Association of Japan |
| Warsaw | FinTech Poland |

Section 2. Index Performance Score

For each Hub, we calculated an aggregate Index Performance Score which is predicated upon three business indices ("Business Indices"). Equal weighting has been given to these indices.

- Global Financial Centre Index 2016¹ (GFCI)
- Doing Business 2017² (DB)
- Global Innovation Index 2016³ (GII)

A lower Index Performance Score suggests that the Hub is more conducive to the growth of FinTech.

Note 1: The Doing Business and Global Innovation Indices score and rank countries as a whole and do not provide further breakdowns at the city-level. As a result, the same DB or GII rankings were used for all cities in the same country. *(Example: New York, Silicon Valley and Chicago use the same DB (8) and GII (4) scores.)*

Note 2: We are aware that at the point of going to press an updated Global Financial Centre Index 21 was published. Our research is based on the GFCI 20, published in September 2016.

Note 3: Four Hubs (Auckland, Bangalore, Lagos and Nairobi) are not currently included in the Global Financial Centre Index and therefore have an Index Performance Score marked "n/a". We seek to address this as part of the next full report.

- World Bank. 2017. Doing Business 2017: Equal Opportunity for All. Washington, DC: World Bank. DOI: 10.1596/978-1-4648-0948-4. License: Creative Commons Attribution CC BY 3.0 IGO. Available here: http://www.doingbusiness.org/rankings
- 2. Z/Yen. 2016. The Global Financial Centres Index 20, September 2016. Yeandle, Z/Yen London. Available here: http://www.longfinance.net/images/gfci/20/GFCI20_26Sep2016.pdf
- 3. Cornell University, INSEAD, and WIPO (2016): The Global Innovation Index 2016: Winning with Global Innovation, Ithaca, Fontainebleau, and Geneva. License: Creative Commons Attribution CC BY 3.0 IGO. Available here: https://www.globalinnovationindex.org

Global Financial Centre Index (GFCI)

Research indicates that many factors combine to make a financial centre competitive. The Global Financial Centre Index (GFCI) was created in 2005 and was first published by Z/Yen Group in March 2007. The GFCI provides profiles, ratings and rankings for financial centres, drawing on two separate sources of data:

- Instrumental Factors: Business Environment, Financial Sector Development, Infrastructure, Human Capital and Reputational and General Factors
- Financial Centre Assessments: in the form of responses to an online survey

The GFCI is important for the comparison of FinTech hubs, as it relates directly to the competitiveness of that particular location as a financial centre. While the Instrumental Factors set out above are typically the types of factors that would also go towards determining the strength of a Hub in supporting a FinTech ecosystem, strong global financial competitiveness does not necessarily equate to a strong environment for FinTech. A measure such as GFCI may also be representative of existing entrenched interests backed by an infrastructure and regulatory system that tend towards supporting the status quo. A truly disruptive economic micro-climate also needs that elusive x-factor that enables innovation to naturally occur.

Doing Business (DB)

Doing Business 2017 is the 14th in a series of annual reports on the regulations that enhance business activity and those that constrain it. DB presents quantitative indicators on business regulation and the protection of property rights across 190 economies. DB measures the legal and regulatory environment in which companies operate. This is crucial for FinTech companies. Long delays in setting up a company can stifle new ideas. Likewise a non-transparent legal system deters investors and customers from entering into relationships with anyone other than known counterparties, making the development of a knowledge-sharing ecosystem much harder. As the FinTech sector is characterised by early and growth stage companies, the ease of doing business is a crucial measure of the viability of a particular Hub. It should be noted that many governments in countries which have poor DB scores can and do get around this by creating enterprise- / free- / technology-zones that remove many of the regular business restrictions. Therefore a lower DB score does not necessarily equate to a poor FinTech ecosystem.

Global Innovation Index (GII)

First published in 2007, the Global Innovation Index is the result of a collaboration between Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO) and their Knowledge Partners. GII aims to capture the multi-dimensional facets of innovation by providing a rich database of detailed metrics for 128 economies that represent 92.8% of the world's population and 97.9% of global GDP. Since FinTech is inherently disruptive, innovation is a key factor in determining whether a particular Hub can foster a successful FinTech sector. In particular, the wide variety of measures used in the GII would be expected to capture the various innovation components for a technology-related sector. It should be noted that innovation is broader than solely technological innovation. For example, mobile payments via SMS have been a staple of the African payments system for many years (predating mobile payments in developed markets) – the "innovation" there was not technical, it was deployment of the right technology in the right context.

Section 3. Hub Indicators

We have created a series of qualitative indicators that enable comparison of the FinTech sector in each Hub across a set of subjective and objective criteria. These "Hub Indicators" fulfil a number of roles:

- 01. They help identify current strengths and core competences within each Hub. This is important because it provides startups with an indication of which locations their particular niche would thrive in, and global investors with information to identify opportunities that fit their investment criteria.
- 02. They provide a "state of the nation" overview which covers some of the major players (companies, investors or accelerators) in each market.
- 03. They highlight the local strengths and challenges for FinTech through a scoring system. This quantitative measure enables us to compare data across the 44 Hubs and track progress in future GFHF reports.

The Hub Indicators were collated through direct contact with the Hub Representatives. A questionnaire was sent to each Hub representative with the questions that form the basis of the research. Additional guidelines were provided and an interview took place with each Hub Representative to allow them to substantiate and clarify their responses. The responses received were then sense-checked by the research team through desktop research of publicly available information and with a Deloitte FinTech subject matter expert ("SME"). Where any queries or discrepancies arose, we went back to the Hub Representative for clarification.

The final responses reflect the perspectives of the local Hub Representatives based on their knowledge and experience and are not the views of the GFHF or Deloitte.

Questionnaire

The following is a breakdown and explanation of each question in the Hub Indicator Questionnaire.

Self Rated Questions

Hub Representatives were asked to provide a self-evaluation of six key areas in their FinTech Hub, rating each of these on a scale of 1 (Not Good) to 5 (Excellent).

Scale:

- 01. Not Good: It is an issue that we are aware of
- 02. Average: We do no better or worse than other Hubs
- 03. Better than average: We do better than other Hubs
- 04. Good: We are happy with the current state
- 05. Excellent: This is something that defines our Hub

Self-assessment elements:

- **Regulation**: extent to which regulator(s) and the regulatory environment are conducive to FinTech growth. For example, is it challenging to obtain a banking license? Does the regulator support sandbox concepts or host surgeries to support startups? Does the regulator engage in the FinTech ecosystem?
- Foreign startups: extent to which companies from other countries locate to the Hub to launch their FinTech business. For example, are there any initiatives or agreements in place with other Hubs to help FinTechs land and expand?
- **Proximity to customers**: size of the market and the extent to which consumers and businesses within the Hubs are adopting FinTech solutions. *For example, how quickly do customers and businesses adopt new technologies? How large is the domestic market?*

- **Proximity to expertise**: availability and level of talent (financial services, technological and entrepreneurial talent) within the Hubs. *For example, is there a vibrant financial services or tech sector in the Hub? Is there a balanced mix of skills? Is there a strong STEM education pipeline? If there isn't strong homegrown talent, are there initiatives to attract talent from other Hubs?*
- Innovation culture: Hubs' attitudes to innovation. For example, how many entrepreneurs and startups are in the Hub? What is the attitude towards risks and failure? Is there a history of collaborating to develop new ideas?
- **Government support**: extent to which the Hubs' government (local and state) supports FinTech. For example, is FinTech on the government's agenda? Has the government enacted or supported policies that promote FinTech growth? Does the government provide funding for FinTech companies, events or co-working spaces?

Dropdown and Narrative Questions

These questions were comparatively subjective. Nevertheless, they constituted an important part of the development of the Connecting Global FinTech: Hub Review. The narratives enabled the creation of "Hub Profiles" for the Hubs, which can be expanded upon in future editions in order to further develop Hub comparisons. This could include, for example, developing the criteria (such as market value, or value of investments) for selecting the "Top" companies, investors or accelerators.

Hub Representatives were asked to select the most significant technologies, innovation areas and challenges in their local FinTech market from a dropdown list provided by the GFHF. Here, innovation areas refer to the financial services sectors being disrupted by FinTech.

Individual Hubs have been the subject of extensive research and data collection, and the relevant Hub Representatives have reported both subjectively and objectively derived responses. The future objective will be to increase the standardisation of reporting across global Hubs.

Dropdown Questions

01. What are the top five innovation areas in your Hub?

- 02. What are the top five underlying technologies to make those innovations happen?
- 03. What are the top three challenges of doing business there?

Narrative Questions

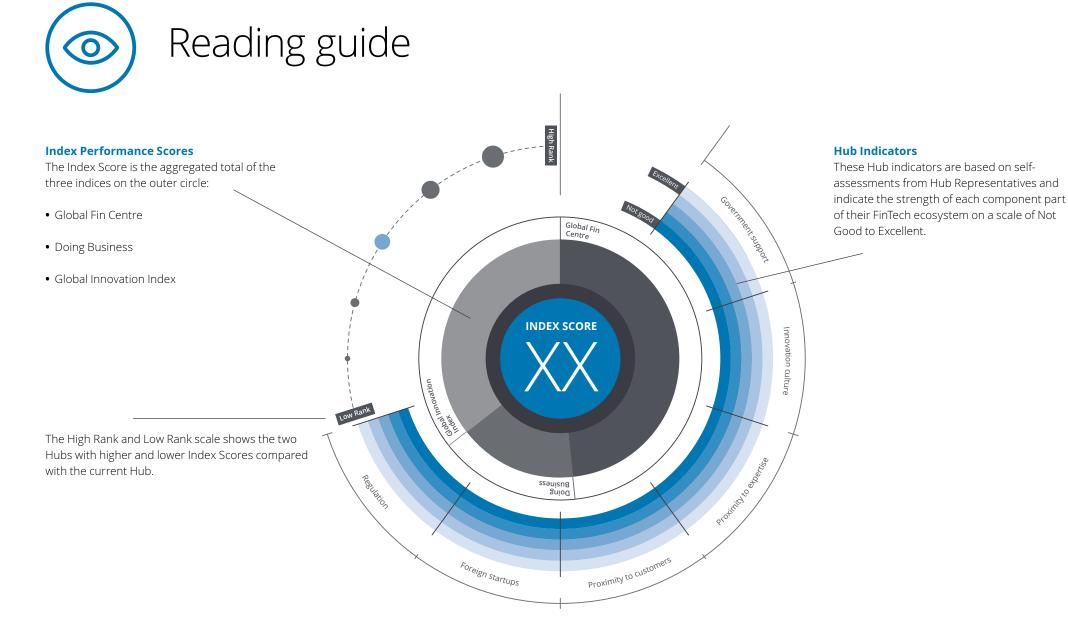
- 01. What sets you apart from other regional Hubs?
- 02. Who are the big investors?
- 03. What are the top accelerators and work spaces?
- 04. What are the top FinTech companies in your Hub?
- 05. What is the biggest success story to come out of your ecosystem?
- 06. What does the next 12 months look like?

Deloitte reviews

To provide an additional layer of depth and challenge to the self-evaluations for the 24 New Hubs, we also reviewed Hub Representatives' responses with Deloitte's global network of FinTech SMEs. Challenges and changes proposed by SMEs were presented back to Hub Representatives for them to accept or reject.

Responses for Hubs profiled in the Connecting Global FinTech: Hub Review 2016 were reviewed with Deloitte SMEs at the time of research and have not been reviewed again in the current Interim report.

The final opinions published are that of the Hub Representatives' and not the opinions of the GFHF or Deloitte.



Research findings





Louise Brett UK FinTech Lead Partner, Deloitte

Where is all the activity?

FinTech is a truly global phenomenon. This **interim** report is driven by the exciting growth of FinTech hubs globally who have become members of the Federation and sets the stage for our full GFHF Report being launched at Sibos later this year.

Although level of investment is by no means the only factor contributing to the strength of FinTech Hubs, it is a good indicator of activity. Therefore, a look at the investment landscape on page 19 gives us an idea of where FinTech activity is at its hottest across the globe.

Our report now covers 20 Hubs in Europe, 12 in Asia Pacific and 12 from other regions around the world and offers a broadly representative overview of the global FinTech landscape. With that said, there are still a few notable Hubs that have not yet joined the GFHF and therefore have not been featured in the current report. *(For example, Beijing).* In addition, we are aware that there are

| GFHF Hubs | New Hubs | Old Hubs | Total |
|---------------------------|----------|----------|-------|
| Africa | 1 | 2 | 3 |
| Asia Pacific | 7 | 5 | 12 |
| Central and South America | 1 | 1 | 2 |
| Europe | 12 | 8 | 20 |
| Middle East | 2 | 1 | 3 |
| North America | 1 | 3 | 4 |
| Grand Total | 24 | 20 | 44 |

interesting developments from emergent Hubs across Eastern Europe, South America and Africa that have not yet been represented in our report. As the network of GFHF participants expands, the scope of our report will become increasingly comprehensive.

Emergent themes from the regions

When we analysed the data from the 24 New Hubs we profiled and coupled it with additional desk research, a number of interesting regional themes emerged across the globe:

• On the whole, our research found that new European Hubs (particularly those within the European Union) tended to agree that there is good access to talent in their Hubs. On the other hand, most of these 12 European New Hubs rated regulation in their Hub negatively and regulatory barriers were cited as a common challenge.

Consistent with this, our research on regulatory sandboxes and regulator collaboration showed that in Europe, only the UK, Netherlands, Russia, Switzerland and Norway (5 of the total 20 GFHF European Fintech hubs) have committed to a regulatory sandbox and only the UK, French and Swiss regulators have signed FinTech co-operation agreements with other regulators across the globe.

• In Asia Pacific, Hub Representatives were more positive about regulation in their Hubs compared to their European counterparts and with good reason too. Over the last year, we have seen very positive developments from regulators across Asia and the pace of change has been extremely encouraging. For example, of the 16 regulators who have either set up or have committed to setting up regulatory sandboxes, seven are in Asia. Moreover, Asian regulators have also been proactive in cooperating with other regulatory bodies outside of their region. For example, as shown on the regulatory collaboration map on page 21, China, South Korea, Hong Kong, Japan, Singapore, Australia and India have all signed international cooperation agreements with other regulators; and Singapore's MAS has signed more FinTech cooperation agreements largely remain to be seen, cooperation between regulators globally has undeniably become a trend.

- Although our research only included two Hubs from the Gulf region, both Hub Representatives presented very similar self-assessments. For one, both Hubs claimed excellent government and regulator support for FinTech and these are evidenced by the range of initiatives that the government and regulatory bodies are driving together. For example, the RegLab in Abu Dhabi, the FinTech Hive and 2020 blockchain ambition in Dubai and the FinTech work driven by the EDB in Bahrain.
- In Africa, FinTech developments continue to be concentrated around mobile and social payments. Highly successful FinTechs are rare as low levels of government and regulatory support and lack of quality infrastructure continue to be barriers to scaling.
- In the Central and South America region, Brazil leads the pack by way of investment and number of FinTechs and much of the activity is concentrated in Sao Paulo. Broadly, across the region, corporates and investors are the ones proactively developing the local FinTech ecosystems. However, there are positive signals that government and regulator support for FinTech is increasing. For example, Mexico's new financial inclusion strategy is expected to promote FinTech growth.
- Finally, we complete the map with North America. While Silicon Valley and New York continue to be the indisputable top FinTech Hubs in the USA, and Toronto in Canada with 80% of the Canadian FinTech activity in this Hub, over the last year we have seen a number of other emerging Hubs: Chicago, which has been included in this Interim report; and Charlotte, North Carolina, which will feature in the next GFHF report. Another interesting development in the USA in recent months has been regulation, particularly in regards to the OCC's FinTech charter. As the USA's complex and fragmented regulatory environment has been cited as a challenge by US FinTech Hubs in our research, it will be interesting to review these developments again in our full Sibos report which will be launched in October.

Closing remarks

As we have seen, FinTech ecosystems continue to evolve at pace across the globe.

As these ecosystems evolve, so too will the report and its methodology for assessing and presenting the FinTech developments in these Hubs.

As identified within the Readers' Note section, we are pleased to be working with the Global FinTech Hubs Federation to review and refine the methodology and improve the robustness of the assessments currently being completed by each Hub.

Without giving away too much, we are very excited about the new Full Report that we will be releasing at Sibos in October and look forward to working closely with ecosystem participants across all the GFHF Hubs over the coming months.

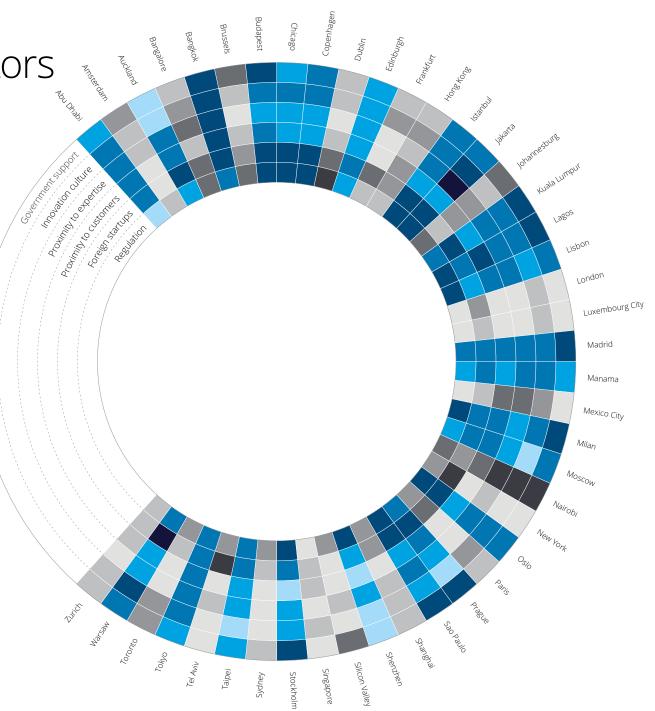
Overview – Index Performance Scores



Overview – Hub Indicators

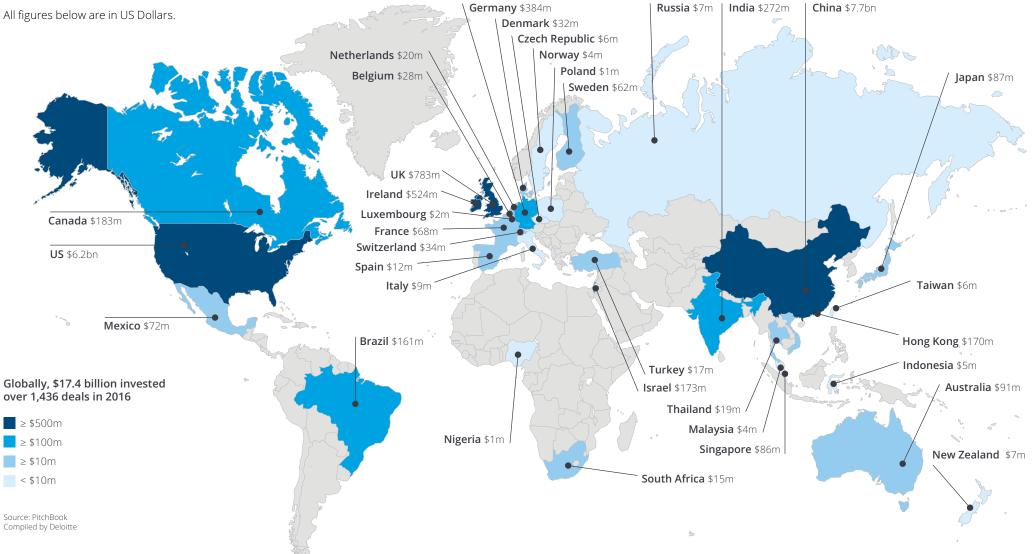


This diagram lists the Hubs from left to right in alphabetical order. The colours of the Hub Indicators reflect the response given by the Hub Representative in relation to this category.



Global FinTech VC deal value 2016

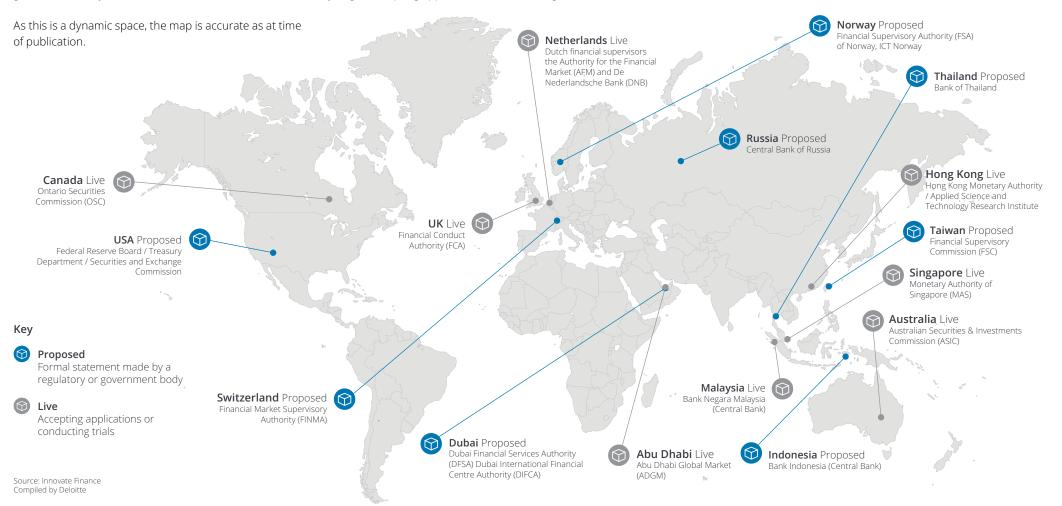
The map below shows the 2016 global FinTech deal values for countries covered by this Interim report. Note that Bahrain, Hungary, Kenya and UAE had deal values less than \$1 million and therefore were not included in the map below.



Map of regulatory sandboxes

A regulatory sandbox is a regulator-driven initiative which allows businesses to test innovative products, services, business models and delivery mechanisms in a live environment. Typically, some regulatory requirements are amended to create a bespoke framework for the duration of an on-market trial.

The map below shows all live and proposed regulatory sandboxes (and similar regulatory initiatives). Proposed sandboxes are ones on which a formal statement has been made by a regulatory or government body. Live sandboxes are ones which have already began accepting applications or conducting trials.



Location

Abu Dhabi

Australia

Canada

China

France

Hong Kong

Agreements with other regulators

(in order of agreement date)

4: UK, Singapore, Canada, Kenya

1: Singapore

2: Australia, UK

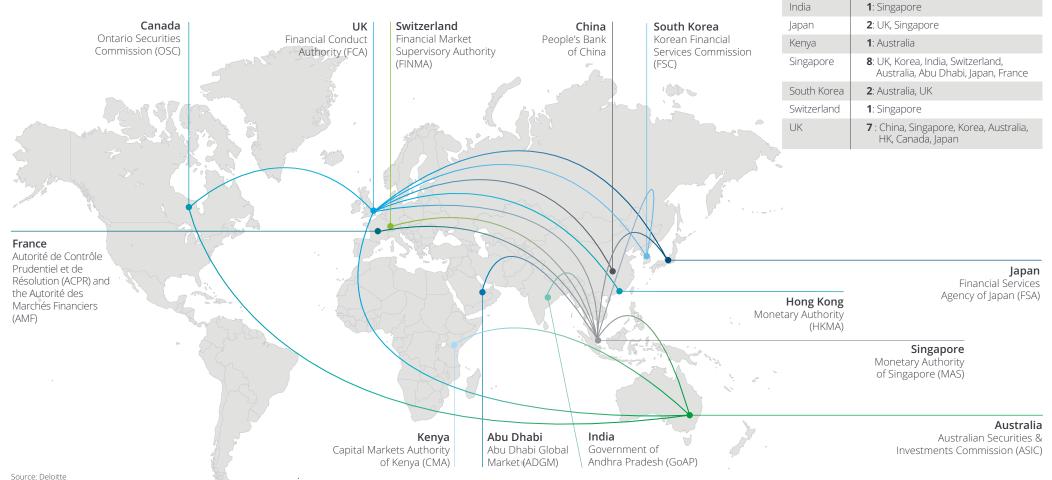
1: Singapore 1: UK

1: UK

Map of regulatory collaboration

Since March 2016, a number of regulators have signed co-operation agreements to "enable the regulators to share information about financial services innovations in their respective markets, including emerging trends and regulatory issues" and help FinTechs in their region to scale internationally. The map below shows all the formal co-operation agreements between regulators.

As this is a dynamic space, the map is accurate to 28th March 2017.



Abu Dhabi Auckland Bangkok **Budapest** Chicago Copenhagen Edinburgh Istanbul Jakarta Kuala Lumpur Lagos Lisbon Madrid Manama Milan Moscow Oslo Prague Sao Paulo Shenzhen Stockholm Taipei Tokyo Warsaw

New Hubs...

New Hubs

The following section contains an analysis of the 24 FinTech Hubs that are new additions to the Connecting Global FinTech : Hub Review report. The analysis captures the following insights:

1. An Index Performance Score that combines these key indices:

- Global Innovation Index (released 15 August 2016)
- Global Financial Centre Index (released September 2016)
- Doing Business Index (released October 2016)

The Index Performance Score can be found in the centre of each Hub's dedicated diagram. The topleft quadrant shows how the Index Performance Score compares to other Hubs.

If a Hub receives a lower Index Performance Score, it can be said that the Hub is more conducive to FinTech growth. However, the analysis is not designed to rank each of these Hubs, as a more rigorous examination across multiple categories is required for in-depth benchmarking. Future iterations of this analysis will aim to incorporate more holistic factors outside the global indices included in the Index Performance Score.

2. A qualitative analysis of the Hub Indicators and further details on key Hub features, based on interviews conducted with local Hub Representatives.

The remaining circumference of the diagram captures the qualitative analysis on Hub Indicators.

Further details on key Hub features, such as workspaces and accelerators, top FinTech investors and the future of the FinTech Hub, are presented thereafter. The insights provided by the Hub Representatives are subjective and based on their experiences within the local Hub. These opinions are designed to add to the understanding of local FinTech activity and are not opinions of the GFHF or Deloitte.

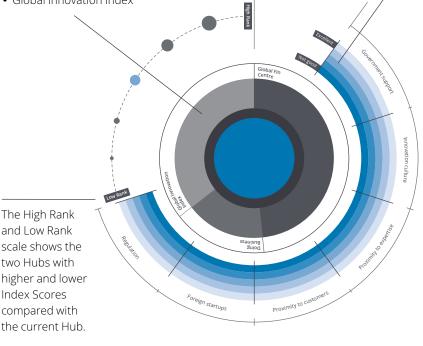
Index Performance Scores

The Index Score is the aggregated total of the three indices on the outer circle:

- Global Fin Centre
- Doing Business
- Global Innovation Index

Hub Indicators

These Hub indicators are based on self-assessments from Hub Representatives and indicate the strength of each component part of their FinTech ecosystem on a scale of Not Good to Excellent.





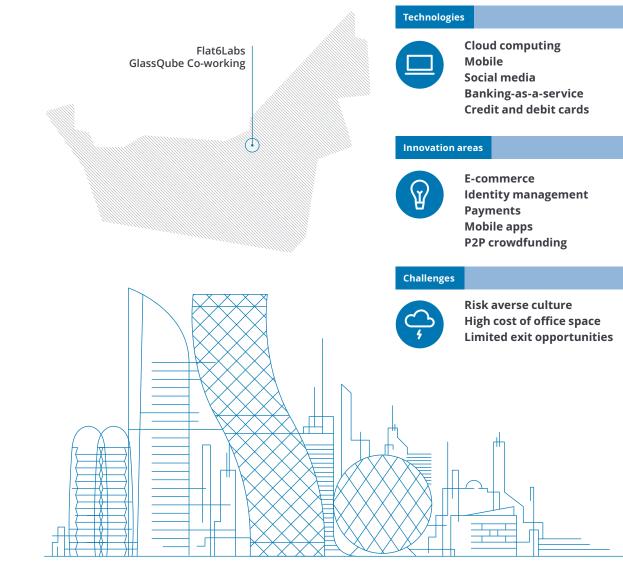
Abu Dhabi, the capital and economic centre of the United Arab Emirates, is home to some of the world's largest sovereign wealth funds. As a free-trade zone, it boasts a strong financial centre; stable political, regulatory and judicial regimes; a business-friendly environment; excellent technology infrastructure and availability of capital. Furthermore, its location in the East-West corridor means that Abu Dhabi is well-positioned to be the FinTech nexus for the MENA region.

> Hub representative Abu Dhabi Global Market

> > CEO Richard Teng



Best workspace and accelerators



Hub features

Top FinTech companies

While FinTech is a recent development in Abu Dhabi, some financial institutions have started embracing and deploying FinTech solutions. For example: The National Bank of Abu Dhabi (NBAD) was the first bank in MENA to go live on blockchain for real time cross border payments with Ripple, the Abu Dhabi Islamic Bank (ADIB) partnered with Fidor Bank to launch the region's first 'community based digital bank' and within the first batch of 11 Regulatory Laboratory applications, we see a mix of FinTech players including robo-advisors, big data, crowdfunders and a digital bank.

Big investors

Abu Dhabi is home to some of the largest sovereign wealth funds and financial institutions (e.g., National Bank of Abu Dhabi, the largest bank in the MENA region) and a high concentration of institutional and private wealth.

Success stories

The launch of the RegLab was a milestone success for Abu Dhabi as this marked the openness and support by regulators and government towards innovation.

The collaboration between banks and startups, and the banks' innovation strategies more broadly, is also another success story as it highlights the attitude of the main institutions towards FinTech.

The future

In 2017, ADGM plans to host and organise a FinTech Summit. Leading up to the Summit, there will be a series of FinTech hackathon / demo day events to showcase the FinTech entrepreneurial scene in the region. ADGM received the first batch of 11 applications for the RegLab in January 2017 and expects to complete its assessment for the first batch and open the 2nd batch of application in Q2 2017.



Auckland is New Zealand's largest and most internationally connected hub, with a third of the country's population and the largest number of businesses. The city hosts the entire diverse spectrum of financial services, as well as the largest concentration of the country's vibrant tech sector. Combine this with strong central and local government support and direct links to the country's other hubs, Auckland is an ideal environment for innovating FinTech.

> Hub representative New Zealand Financial Innovation and Technology Association (FinTechNZ)

> > CEO Mitchell Pham

Low Rank

Regulation

* The data for Auckland is not available on the Global Financial Centre Index. As such, Auckland has not been given an Index Performance Score.

Golefilment support

Self evaulation of the hub in six key areas

NA GLOBAL FIN CERTIC

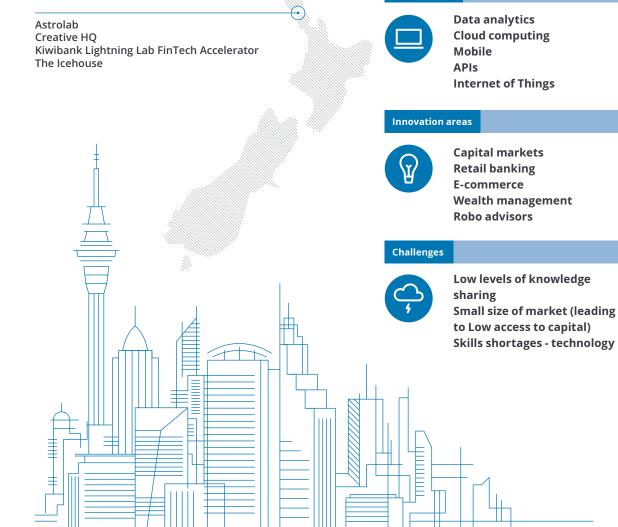
Global Innovation

INDEX SCORE

Foreign startups

n/a*

Best workspace and accelerators



Hub features

Technologies

Top FinTech companies

Equitise, Harmoney, InsuredHQ, Latipay, Paymark, SavvyKiwi, Trademe, Xero.

Big investors

All major banks, insurers and finance companie; venture funds; NZ Venture Investment Fund; and Callaghan Innovations.

Success stories

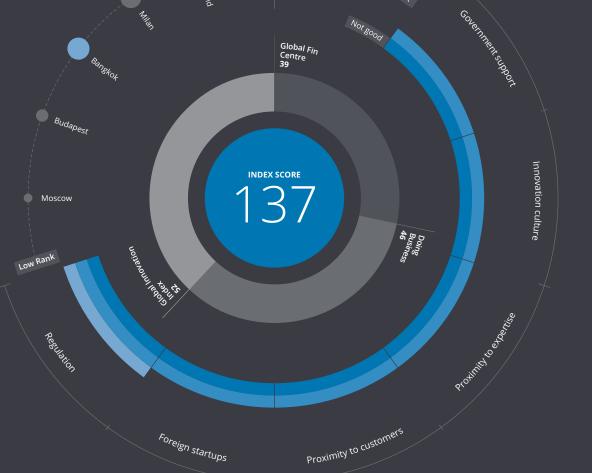
Xero, a software company that develops cloud-based accounting software for small and medium-sized businesses, has been a very successful FinTech to emerge from the country. At the other end of the spectrum, LatiPay, an online payments service between China and New Zealand, is gaining a significant amount of growth and traction, and will likely emerge as a future success story.

The future

In 2017, there will be a much more visible FinTech community in Auckland, and in New Zealand more broadly. While policymakers and regulators traditionally focused on Wellington, Auckland will see a lot more policy engagement on FinTech issues, challenges and opportunities. 2017 will also see more connections between Auckland FinTech innovators and the international community who are already reaching out to the hub.



The Thai FinTech ecosystem is growing rapidly. In 2016, the number of FinTech startups doubled from around 40 to almost 90. Bangkok, which is at the centre of Thailand's economy and financial industry, is driving FinTech development in Thailand. Most major banks have launched their own corporate VCs, innovation labs and accelerator programs for FinTech startups. In Thailand, regulators (the Securities and Exchange Commission and the Bank of Thailand in particular) play an active role in growing the FinTech ecosystem. For example, the SEC launched a FinTech competition to promote and support new ideas of financial innovation.

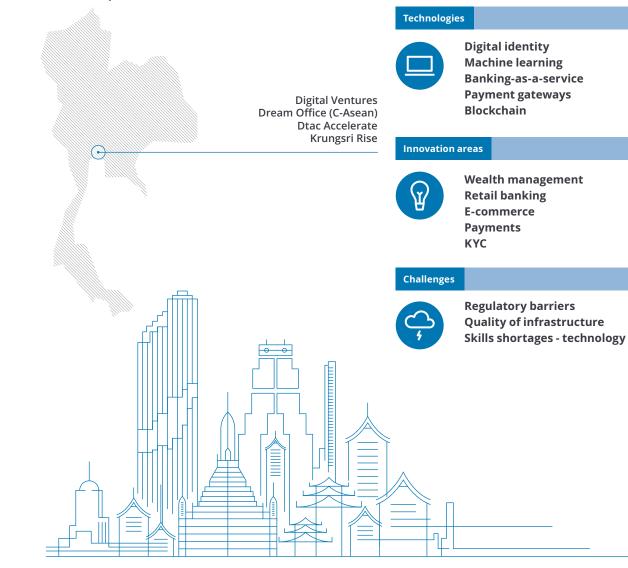


Self evaulation of the hub in six key areas

Hub representative Thai Fintech Association

> Acting President Jessada Sookdhis

Best workspace and accelerators



Hub features

Top FinTech companies

Omise, Digio, Ascend, Claimdi, Stockradars, Finnomena, iTax (Legal Drive), Jitta, Airpay, Piggipo (Neversitup).

Big investors

500 Startups (500 Tuktuks), Dtac Accelerate, True Incube, Golden Gate Ventures, M8VC and Digital Ventures.

Success stories

The Thai FinTech Association was launched in July 2016. More than half of the FinTech startups in Thailand has joined the Thai FinTech Association and there are 100 members from banks, VCs and angel investors, regulators, policy makers, technology partners, experts and entrepreneurs also joined the Thai FinTech Association. In collaboration with Thai FinTech Association, the National Reform Steering Assembly has finished the whitepaper to be FinTech Roadmap for Thailand 4.0.

The future

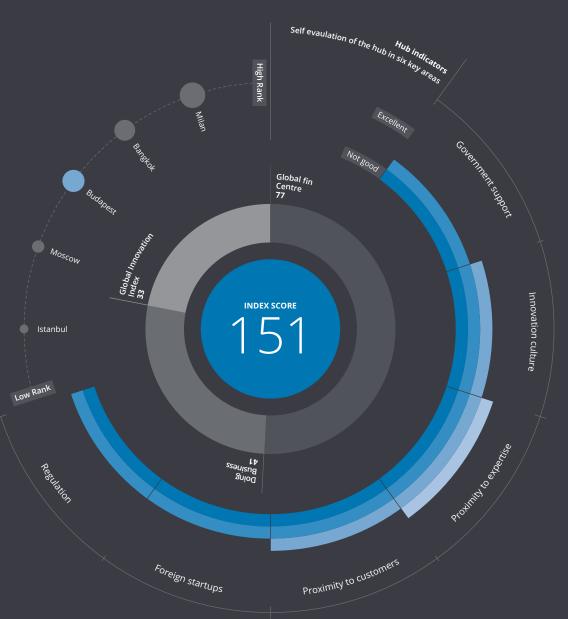
The Bank of Thailand and The Securities and Exchange Commission have launched their regulatory sandboxes and are in the process of participants selection. The Bank of Thailand is expected to issue the license for peer-to-peer lending within Q2-Q3/2017.

There are committees under the National Legislative Assembly, the National Reform Steering Assembly and the National Startup Committee to improve FinTech and Financial infrastructure. Some laws and regulations that are currently obstacles to FinTech development will be proposed to amendment.

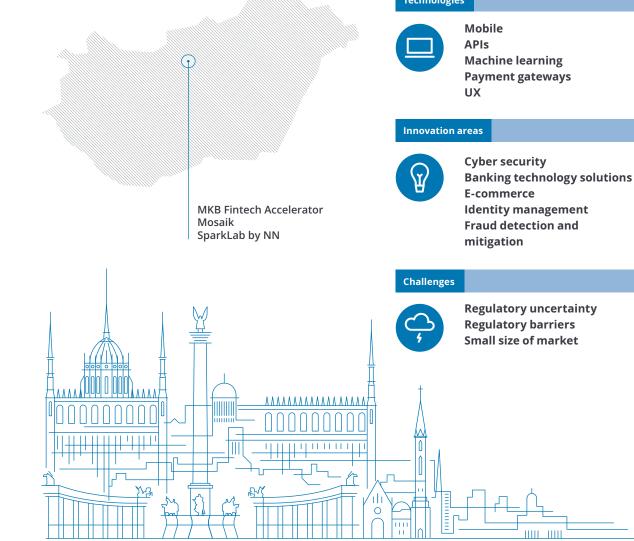


The FinTech industry in Hungary has been gaining considerable momentum over the last year. Hungary and the CEE countries are mostly known for their excellent technological talent pool and innovative technologies.





Best workspace and accelerators



Hub features

Technologies

Top FinTech companies

Shinrai, B-Payment, Blueopes, Wyze, Simple, Cellum, IND, Dorsum and Gravity.

Big investors

Speedinvest, DayOne Capital, HiVentures and OTP Bank.

Success stories

The acquisition of IND Group by Misys in 2014. IND is a leading innovator and provider of online and mobile banking, personal finance management and payments solutions.

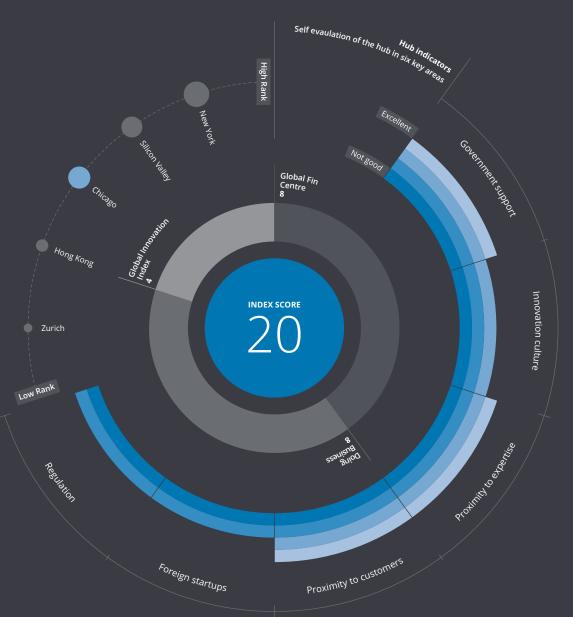
The future

The market will continue to mature. Strong enthusiasm and demand will generate supply. The first Hungarian FinTech accelerator will end its first batch and it is likely that more similar initiatives will start with banks launching their own accelerator programmes. Startups and corporates will become better connected. The regulatory landscape for FinTechs will improve with upcoming changes to account opening and account switching regulations.

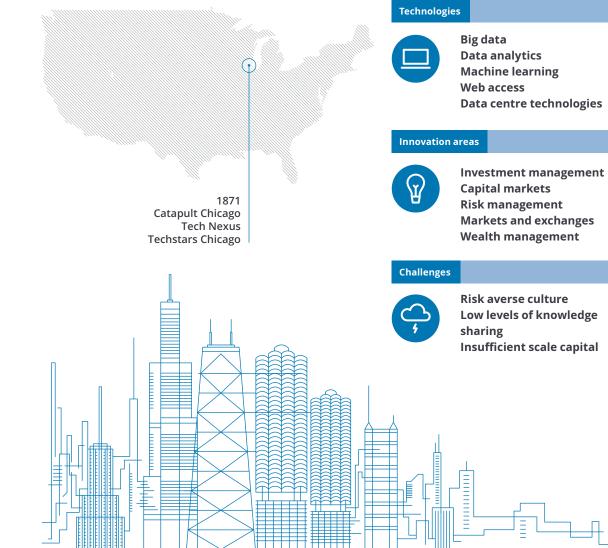


Chicago acts as the epicenter for all FinTech activity in the Midwest, representing well over 20,000 financial institutions. It is home to two fifths of the top business universities in the US and over 6% of the Chicago workforce are focused on the financial ecosystem contributing to its already significant talent pool. With government support, Chicago companies are able to quickly innovate to create groundbreaking technology.





Best workspace and accelerators



Hub features

Markets and exchanges

Low levels of knowledge

Top FinTech companies

Braintree, Avant, Envestnet, Morningstar, Discover, Allstate, Aon and CME.

Big investors

Jump Capital, Pritzker Group Venture Capital, MATH Venture Partners, Chicago Ventures and CME Ventures.

Success stories

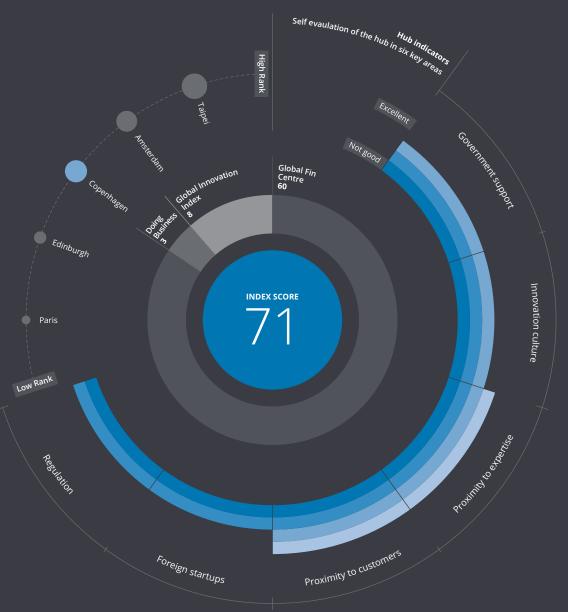
Born in Chicago in 2007, Braintree provides software that helps businesses of all sizes accept and process payments to help maximise opportunities and revenue growth. It was acquired by PayPal in 2013 for \$800 million.

The future

Over the next 12 months, we expect to see state and local government partnering with the private sector and NGOs to pursue greater adoption of blockchain as well as creating an innovation friendly environment. 2017 will also see the launch of Currency, a FinTech centre of excellence and development of an innovationfriendly regulatory stance.

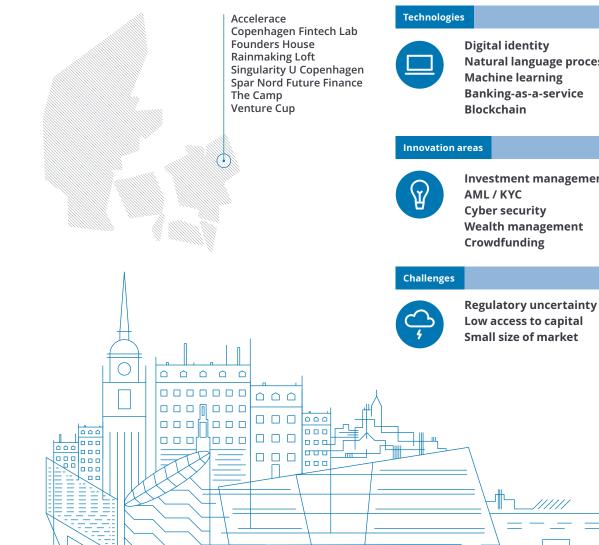


Ranked highly in the World Bank Group's Ease of Doing Business Index, Denmark boasts a strong digital heritage, digital-minded regulators and a tech savvy population. A strong and supportive ecosystem consisting of financial, academic, and regulatory institutions are ready to see FinTechs scale. The Danish market is mature and the possibilities near limitless: a perfect environment for FinTech startups to thrive and test solutions.



Hub representative Copenhagen FinTech CEO Thomas Krogh Jensen

Best workspace and accelerators



Hub features

Natural language processing **Banking-as-a-service**

Investment management Wealth management

Low access to capital Small size of market

Top FinTech companies

Lunarway, Coinify, Hufsy, Chainanlysis, Crediwire, Cardlay, Pleo, Ernit, Lendino, Clearhaus, Samlino, Monera and MyMonii.

Big investors

Seed Capital, SEB Ventures, North East Ventures, Private Business Angels and NFT Ventures.

Success stories

Tradeshift is one company which has really taken off, with a presence in US and Chinese markets. Lunar Way and Coinify are also emerging success stories. Founded in 2014, Coinify's payment and trade services offer businesses and individuals easy access to over 15 blockchain currencies (including bitcoin, ether and ripple). Coinify has emerged as a success story for blockchain and bitcoin in Europe, and not just in Denmark.

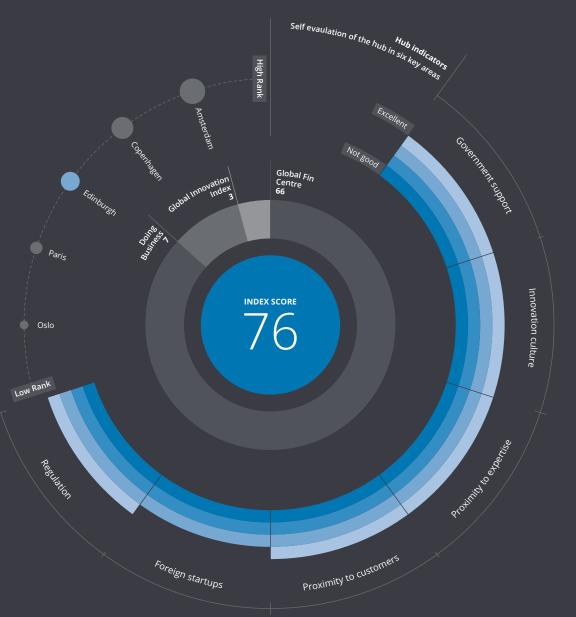
The future

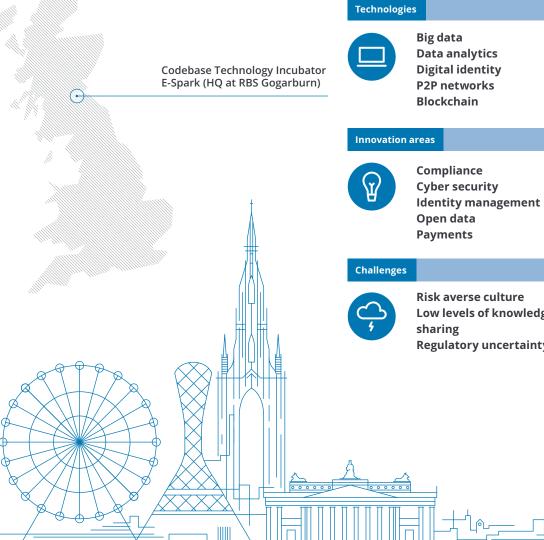
We anticipate strong growth in the number of FinTech startups in Denmark over the next 12 months, with the expansion of the Copenhagen FinTech Lab. As the ecosystem grows, we expect Copenhagen to attract more risk capital and foreign startups, as well as more tech talent. 2017 will also see the launch of a Copenhagen FinTech Accelerator, more partnerships between universities, corporates and startups in Denmark and stronger bridges between Denmark and other international hubs.



Edinburgh is a significant global financial services centre, home to large financial institutions and challenger banks. Edinburgh boasts a heritage in technology, engineering and innovation; and there is a strong talent pool emerging from top universities and initiatives such as The School of Informatics, the DataLab, StartEdin, and CodeClan. Edinburgh has all the component parts to enable a thriving FinTech ecosystem and in an area of roughly one sq. mile across the city centre, one can access major FS organisations, deeply experienced technologists, highly intelligent and practical academics and secure early stage funding. There are not many other cities that have an 'ecosystem concentration' like Edinburgh!







Hub features

Risk averse culture Low levels of knowledge **Regulatory uncertainty**

Top FinTech companies

The ID Co., Money Dashboard, Nucleus, Float, FreeAgent, Zonefox, Symphonic Software, Wallet Services, The Lending Crowd and Payfont.

Big investors

Par Equity, Archangels, Scottish Enterprise and Scottish Equity Partners.

Success stories

Successful startups include Nucleus (won investment platform of the year for 2016), Zonefox (recently secured £3.6m Series A), Money Dashboard (awarded Best Personal Finance App 2017 in the British Bank Awards), FreeAgent (first equity crowdfunded business to IPO, achieving a market capitalisation of around £34.1m), Payfont (recently valued at up to £180 million).

The creation of a FinTech strategy for Scotland, sponsored and supported by the government and industry is another success story for Edinburgh. This initiative is already helping to accelerate growth and connection across the industry.

The future

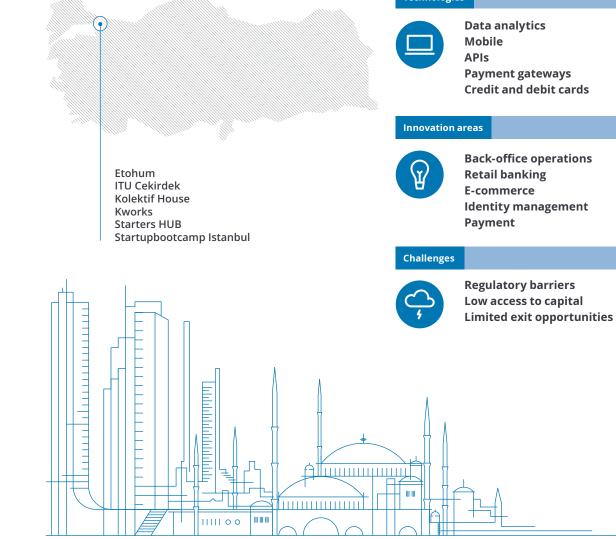
The pace and scale of FinTech startups and scaleups is set to continue across Edinburgh. The jointly backed government and industry initiative to define and drive a FinTech strategy for Scotland is already gathering huge momentum. The next 12 months will see the emergence of a connected FinTech ecosystem in Edinburgh, and Scotland more broadly.



Istanbul is advantageously located, being only four hours' flight away from global leading markets such as London and Dubai, where it is committed to developing new businesses. Istanbul has a vision to become a regional centre of finance within the next 10 years and this is incorporated in the government's plans. Turkey has a very strong banking sector as well as a skillful workforce and digitisation within the banking sector is creating opportunities for talented individuals to explore new innovative ideas in FinTech.







Hub features

Technologies

Top FinTech companies lyziCo, Ininal, Parasut and Cardtek.

Big investors MV Holding, Revo Capital and 212.

Success stories

The Turkish ecosystem succeeded at enabling a co-opetition culture in the highly competitive market. 2016 saw the launch of FinTech specific accelerator programmes, workshops, entrepreneurship programmes and international conferences; and FinTech startups received half of the total startup investments in 2016.

From a startup company perspective, lyzico, which is a payment service provider (PSP) for online businesses and enterprises, is a success story. lyzico raised \$13 million in Series C round and is planning to expand into the Middle East and Europe markets.

The future

Our expectation is to see new FinTech startups with innovative solutions emerge from the market over the next 12 months. With this, we also expect to see a greater spread of funding opportunities and continued growth in the Turkish FinTech ecosystem.

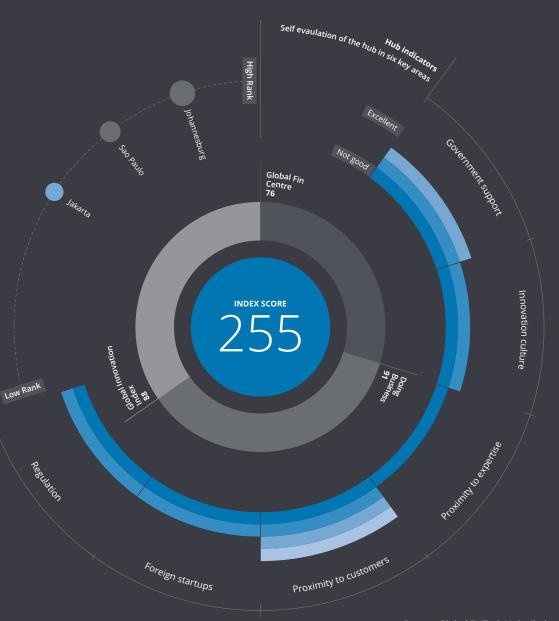
A tale of 44 cities | Jakarta



Indonesia has the most to gain from FinTech and is ripe for disruption. The country has a large unbanked population and high mobile phone penetration. Its massive MSME market is still mostly uncatered for by conventional financing, as evidenced by a wide financing gap. The funding landscape for FinTech has shown significant growth since 2015, with VC firms (including globally recognised firms, local bank-backed VCs, and corporate VCs in general) supporting early stage ventures to access to large pools of Indonesia's untapped growth.

> Hub representative FinTech Association of Indonesia

> > **CEO** Ajisatria Suleiman





Hub features



Top FinTech companies

C88 FinTech Group (proprietor of Cekaja), Midtrans, Doku, Modalku, Investree and Dimo.

Big investors

Sinar Mas Digital Ventures, MDI Ventures (subsidiary of Telkom, Indonesia's largest telco operator), Lippo Group, Kejora Venture, Mandiri Capital Indonesia (subsidiary of Mandiri, Indonesia's largest bank), East Venture and Northstar (for later stage).

Success stories

C88 FinTech Group is the biggest FinTech companies in Indonesia, securing Series B round from major investor like Telstra. It was funded by Kejora Group since the seed stage, and emerged as Indonesia's FinTech powerhouse.

In December 2016, new regulations on P2P lending, payment gateway, and e-wallet demonstrated commitments by the regulator to support FinTech development.

The future

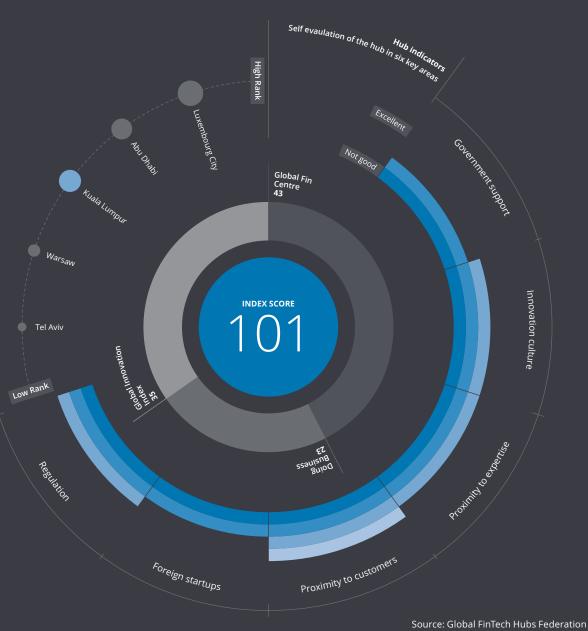
December 2016 was a milestone for Indonesia's FinTech ecosystem as the Central Bank (BI) and the Financial Services Authority (OJK) each issued regulations that paved the way forward for Indonesian FinTech. In 2017, we expect to see companies secure licenses, more companies to flourish and an increase in foreign FinTech companies entering the Indonesian market. BI will also issue a regulatory sandbox in mid 2017 and we hope to see investors gaining more confidence in investing in Indonesian FinTech companies.



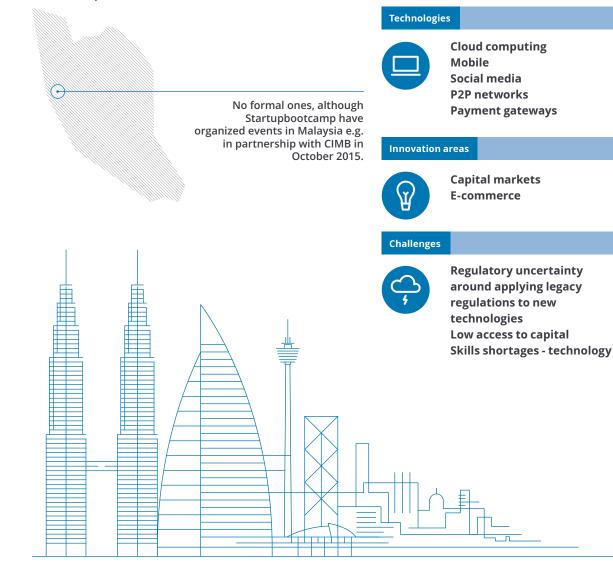
In Malaysia, FinTech is a developing area and attracting significant interest. Malaysian financial services providers were initially nervous and sceptical about the emergence of a possible "threat" but they are now embracing the movement. Likewise, the Malaysian regulators, including the Malaysian Central Bank and Securities Commission, have also joined in the effort to assist the development of FinTech. With the support of industry players and regulators, coupled with a young population keen to embrace technology, Kuala Lumpur has the potential to be a hub of choice in South East Asia.



David Fong



Produced by Deloitte



Hub features

Top FinTech companies

PrimeKeeper, SoftSpace, GHL System Berhad, Jinerxu and RinggitPlus.

Big investors

Venture capitalists such as 500 Startups, Gobi Partners, KK Fund, Venturra Capital, IMJ Investment Partners, Axiata Digital Innovation Fund, among others.

Success stories

The equity crowdfunding platform and the P2P lending platform that were initiated by the Securities Commission are among the top success stories of Malaysia.

The future

The results of the successful applicants for the regulatory sandbox is much awaited. This will set the tone for FinTech in the financial services space, and will likely also shape the regulations that are to come. The more challenging economic environment in Malaysia will see more startups competing for funding.



With a population of around 190 million, Nigeria is the most populated country in Africa and has a large number of vibrant and innovative young people. Lagos, being the commercial capital, has the largest concentration of FinTechs in the country.

Hub representative Fintech Association of Nigeria CEO

Segun Aina

Low Rank

Regulation

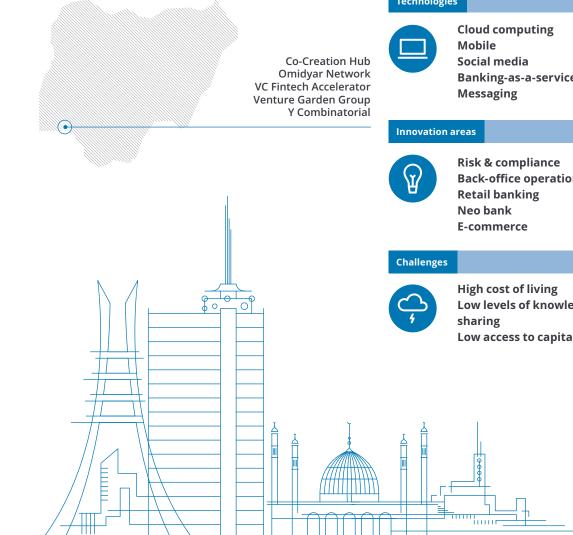
Foreign startups

Gouernment support Doing Business **169** Dal Fin Centre Innovation culture INDEX SCORE n/a* Road and Alexandra Proximity to customers * The data for Lagos is not available on the Global Financial Centre Index. As such, Lagos has not been given an Index Performance Score. Source: Global FinTech Hubs Federation

Self evaulation of the hub in six key areas

High Rar

Produced by Deloitte



Hub features

Technologies

Banking-as-a-service

Back-office operations

Low levels of knowledge Low access to capital

Top FinTech companies

Interswitch, Systemspecs Remita, Paga, Paystack, Appzone, eTranzact, PayPal Nigeria, PiggBank.Ng, Flutterwave, NIBSS, Jumia paycard, OneCare ditch and Niarex Bitcoin.

Big investors

Helios Investment Partners, BCX, Verod Capital, MTN via MIH, Adlevo Capital Managers and OmidyarNetwork.

Success stories

Interswitch, an electronic payment platform with a plan to do a billion dollar listing on the London Stock Exchange, will be the first African FinTech company to list in the UK.

The future

The next 12 months looks very exciting as a number of new players have entered the FinTech space and there is renewed government interest to provide FinTechs with a supportive and enabling environment. We expect to see more collaboration with international hubs, more FinTech focused events and continued interest by financial institutions to support FinTech.

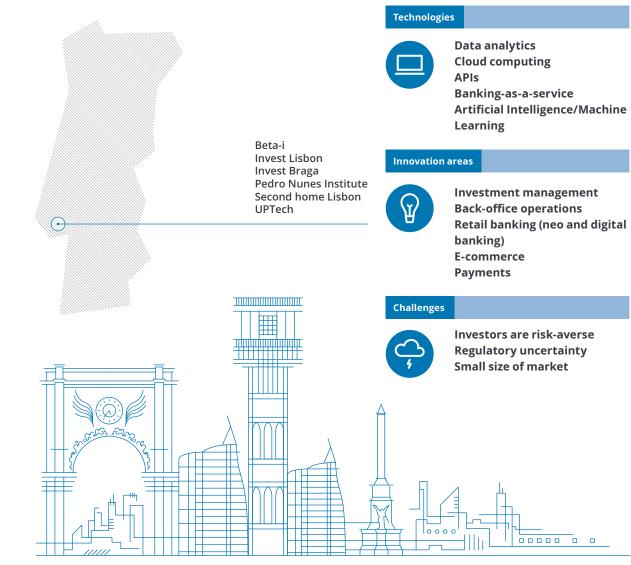


Since 2016, there's a growing focus in the Fintech ecosystem reflected by an increase of Fintech groups, startups, events and meetups. Portugal holds strong technological capabilities, stemming from internationally-recognised universities, is an early adopter of new technologies and a trigger of innovation for different Industries. The technological infrastructure is developed and robust and the administrative and legal process for setting up a startup is quick and easy. However, due to the lack of access to early-stage funding and regulation in capital raising, most Fintech startups are unable to scale past seed funding to series A funding.

> Hub representative Portuguese FinTech and InsurTech Association

> > **CEO** João Machado Mota





Hub features

Top FinTech companies

Feedzai, Seedrs, Crowdprocess, Unbabel, Switch Payments Rpra, Magnifinance, Ebankit-Omnichannel Innovation, Loqr, Petapilot, Orange Bird, Comparajá, Easypay and Rise.

Big investors

Retail banks / Insurance (e.g. Sibs pay foward, Fidelidade Protechting), Private equity (Portugal Ventures), Business angels and Public funds for R&D (e.g. FCT, Fundação Champalimaud).

Success stories

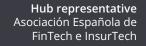
Three success stories to emerge from Lisbon include: Feedzai, Seedrs and Crowdprocess. Feedzai is a series B startup that raised \$17.5 million in 2015; Seedrs, the top European equity crowdfunding site which was co-founded by a Portugese entrepreneur, has its software development team based in Lisbon; and Crowdprocess was considered one of the Lisbon's hottest startups in 2016 by Wired magazine.

The future

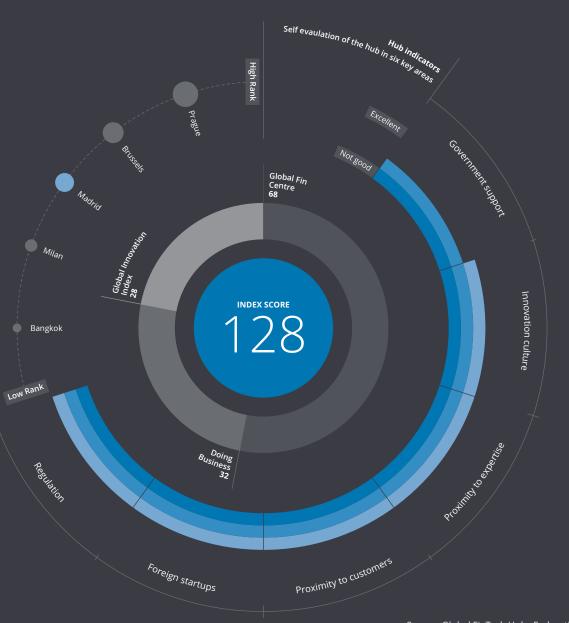
Over the next 12 months, we expect to see an increase in the number of FinTech companies in Lisbon, a growth in talent as well as increased public and private investment. We also expect to see a focus in leveraging the right regulation for the FinTech ecosystem.

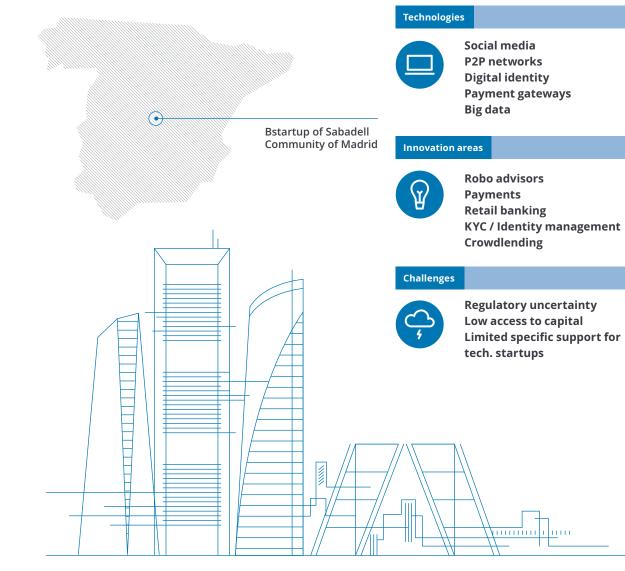


Madrid is at the forefront of driving innovation in Spain. There is a favorable ecosystem for FinTech and entrepreneurship but further government and regulatory support is needed to reduce the barriers to entry. Blockchain, Big data and P2P networks are among the technologies underlying the innovation in Madrid.



CEO Jesus Perez





Hub features

Top FinTech companies

Indexa Capital, Fintonic, Finizens and Housers.

Big investors

FinTech Ventures, Seaya Ventures, Axon Partners Group, Bonsai Venture Capital, Cabiedes & Partners, Nauta Capital and Onza Capital.

Success stories

Fintonic is an application that helps to control expenses. The company won the Google award for the finance category in November 2016.

The future

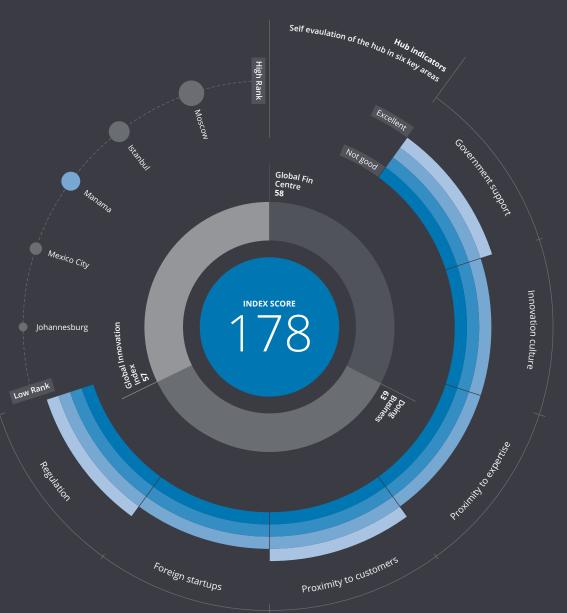
The next 12 months will see the creation of a dedicated FinTech hub in Madrid, further developments to the regulatory environment, increase in capital investments and more foreign companies locating in Madrid.

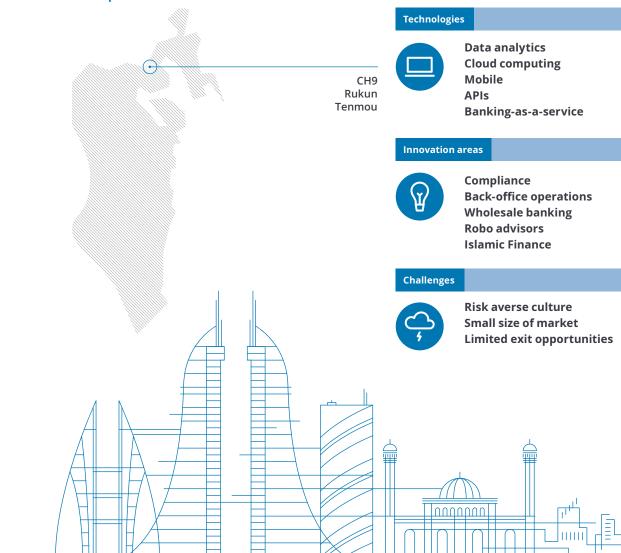


Bahrain is a long standing financial center in the region and the first innovator in Islamic Finance. While Bahrain's FinTech ecosystem is still in early stages of development, the collaboration between public and private stakeholders in developing FinTech makes Bahrain stand out in the global stage. Bahrain has ambitions to be a testbed for startups looking to expand across the GCC and are connecting with other international hubs to learn from best practice. Specific areas of interest for Bahrain include Islamic Finance, crowdfunding, payment services and RegTech.

> Hub representative Economic Development Board of Bahrain

Head of Financial Services & FinTech David Parker





Hub features

Paytabs, PIE & NEC.

Top FinTech companies

Big investors

State institutions, some private entrepreneurs and financial services that are keen on innovation.

Success stories

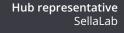
Paytabs is a company that aims to revolutionise online payments by providing simple and trusted Payment Processing Solutions for Merchants or Individuals.

The future

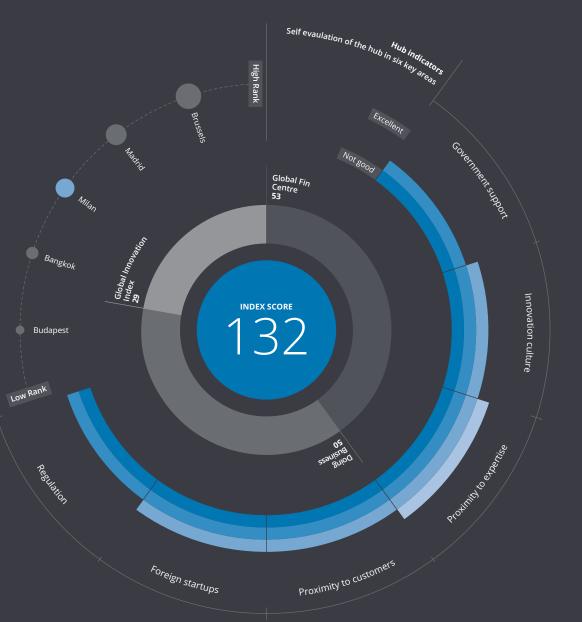
We anticipate a great deal of collaborative activity with the existing financial services industry and the Central Bank on embracing new FinTech players, work on adopting new regulation, setting up the regulatory sandbox and introducing a new FinTech accelerator in Bahrain that would host new local and international market entrants. Bahrain is also looking to host a series of FinTech events to further raise awareness, e.g., the AFS FinTech Forum in March.



Milan is the most attractive city in Italy for launching a startup. Almost one thousand tech companies have established their headquarters in Milan due to its proximity to the rest of Europe and the presence of major national institutional investors, banks and multinational tech companies such as Google, Facebook, Microsoft, Cisco in the city. The city also hosts Borsa Italiana (the local stock exchange) and is the financial centre of the country.



Head of Stefano Azzalin





Hub features

Top FinTech companies

MoneyFarm, AdviseOnly (portfolio management); Satispay (payments); Smartika, Borsadelcredito.it (lending); Siamosoci, Crowdfundme, Starsup (equity crowdfunding); Credimi, Workinvoice (invoice trading); Euklid (bitcoin & algotrading) and Sardex (alternative currency).

Big investors

Innogest SGR, 360 Capital Partners, Principia SGR, United Ventures, Invitalia (public), P101, Panakes Partners, Primomiglio SGR, SellaVentures, Digital Magics, Dpixel, H – Farm Ventures, Finlombarda Gestioni, Quadrivio Capital, Vertis Sgr, Neva Finventures (CVC) and LVenture Group.

Success stories

There are no large exits or IPOs yet. However, MoneyFarm is an Italian company that has collected almost \$30 million within 5 years. At the beginning of 2016, the company extended its operations to the UK and announced new partnerships with Revolut and Uber. It received \$7 million investment from Allianz in September 2016.

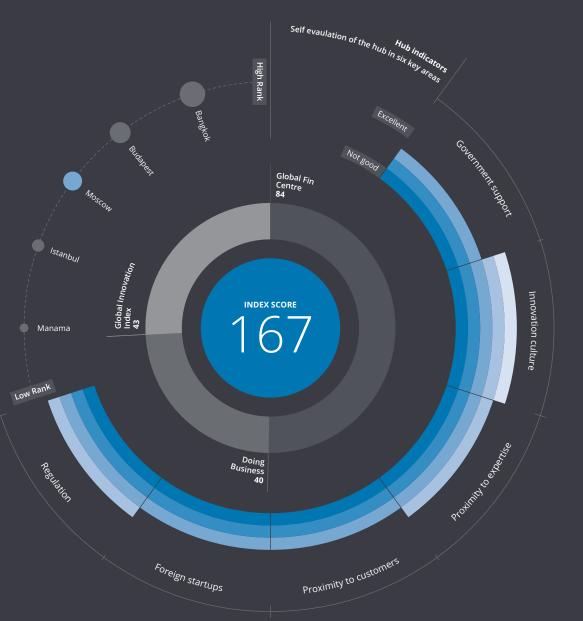
The future

We expect to see FinTech becoming more mainstream with the onset of PSD2. This will create new investment and entrepreneurial opportunities that will lead to greater injection of private capital in the market and a rise of new entrants. In the next 12 months we will also see other international players entering the local market by launching local branches or by following M&A strategies.



The Russian Hub is well recognised for its technological talent pool, especially in areas such as cyber-security, data analytics and web programming. With the ambitious state plan to turn Moscow into a global financial centre and strong government support for innovation, the FinTech industry is quickly gaining pace both in terms of the number of startups and VC investments. Moreover, being one of the largest consumer markets in the world, Russia has a great scope to increase financial inclusion.

> Hub representative Skolkovo FinTech Hub CEO Viktor Vekselberg





Hub features



Regulatory uncertainty Skills shortages – financial Limited exit opportunities

00000

Top FinTech companies

CardsMobile, Cashoff, Double Data, DLS, 2can, Promobot, Vision Labs, Rubbles, Pay-Me and Blackmoon.

Big investors

Russian Venture Company, Sberbank, Almaz Capital, Runa Capital, Leta Capital, iTechCapital, Internet Initiatives Development Fund, ru-Net Ventures, AddVenture, ABRT Venture Fund, VentureClub, E.ventures and IMI.VC.

Success stories

From an investment perspective, success stories include: Otkritie bank (#6 bank in Russia) bought 100% equity of Rocketbank in April 2016, Systema JFSC corporate venture fund invested \$5.5 million in Vision Labs and state-owned Sberbank (#1 in Russia) and Internet Initiatives Development Fund plan to invest \$2.5 million each in Promobot. From an exit perspective, in June 2016, the Waves Platform, a Russian startup creating crypto assets conducted one of the largest ICOs (IPO for bitcoins) of the amount of \$17 million.

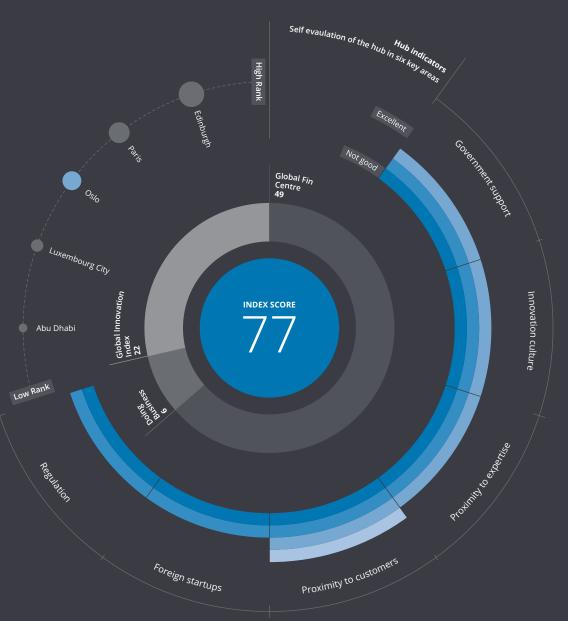
The future

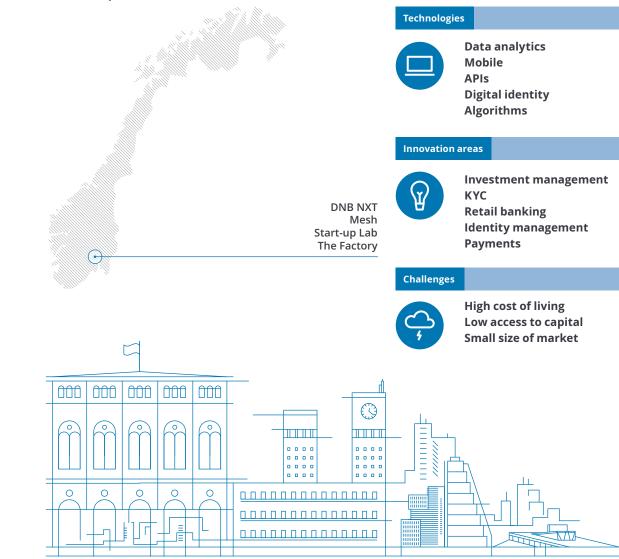
2017 will be an exciting year for Russia. On the regulation side, we expect Russia's Central Bank, in cooperation with key players of the financial industry, to launch a regulatory sandbox. This will boost the emergence of FinTech startups in areas where current regulation is unclear. From an events perspective, in 2017 Russia will be one of the two countries hosting the SWIFT Innotribe Innovation Challenge (along with the African region). In addition, on June 6-7 the Skolkovo Innovation Centre will also be holding its main startup event of the year - the Startup Village, bringing together over 4000 startups (including, FinTechs) and 800 investors from all over the world



Oslo has a growing and vibrant FinTech hub, consisting of approximately 90 companies. The mobile payment market has grown exponentially from zero to vast penetration in less than two years, and the market is now consolidating. Oslo is particularly strong in security, e-ID and authentication solutions, and a growing number of players in robo-investments, savings, and neo-bank platforms are emerging. The Norwegian government is discussing a regulatory sandbox for 2017.







Hub features

Top FinTech companies

FinTech Innovation, Spiff, Fronteer Solutions and Encap Security.

Big investors

Northzone, Alliance Venture, Norwegian Government and Innovation Norway Investment Fund.

Success stories

Vipps is a Norwegian mobile payment application designed for smartphones. It was developed by DNB but is opened up to customers from any Norwegian bank.

The future

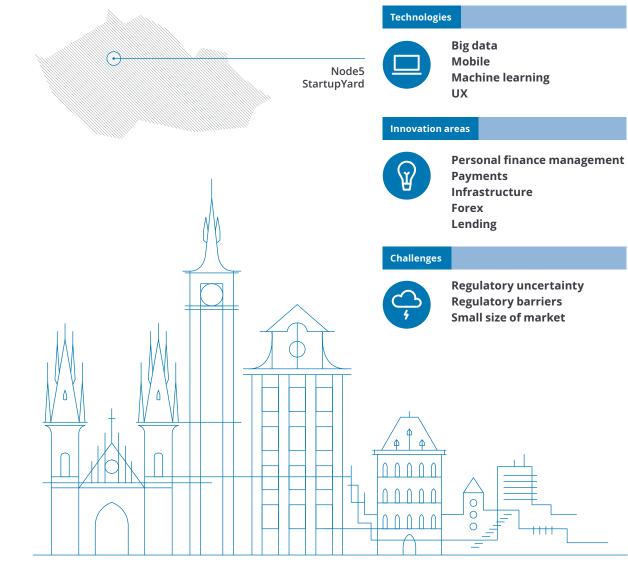
In the next 12 months, we expect to see more partnerships and collaborations between banks and startups; initiatives that make it easier to enter the FinTech market; regulatory developments such as a sandbox; and more investments in Norwegian FinTech. Innovations in investment services and InsurTech will also attract more attention.



Although the majority of FinTech startups in the Czech Republic were founded in the last four years, in the Czech ecosystem, benefiting from a strong technical workforce where labour costs are still significantly more competitive than Western Europe, is gaining momentum and several stars are emerging. As the Czech market population is relatively small, there is strong focus on international expansion and therefore, for many, the Czech Republic represents an "incubator of innovation". However Czech regulation leaves room for improvement and so far there are no direct challengers of core banking services, especially in the areas of current accounts and wealth management.

> Hub representative Czech FinTech Association CEO Markéta Brabcová





Hub features

Top FinTech companies

Payments: Twisto, Spire, Worldcore, kupnajisto, Storyous; Forex: RoklenFX, Wallets: BleskPeněženka; PFM: BudgetBakers, Spendee, ChytryHonza; Insurance: První klubová; Infrastructure: Zingly (Multibanking), SDK.finance; SME Financing/P2P platforms: Zalep.to, InvesticniAukce, Fundlift; Bitcoin: EasyCoin; Others: iDoklad, Fakturoid, Rychlý Výpis.

Big investors

Enern, Miton, Credo Ventures, Rockaway, 3TS, Evolution Equity and J&T Ventures.

Success stories

FinTech success stories emerging from our Hub include Twisto, Zonky and Budgetbakers. Twisto is a FinTech that aims to simplify payments through the smart use of credit. The company has received a number of recognitions and awards including being listed by Forbes as one of Czech's top 20 startups. Zonky is one of the first Czech FinTechs in micro and P2P lending. Budgetbakers is a PFM FinTech with 1.6 million app downloads and more than 1 million of active users.

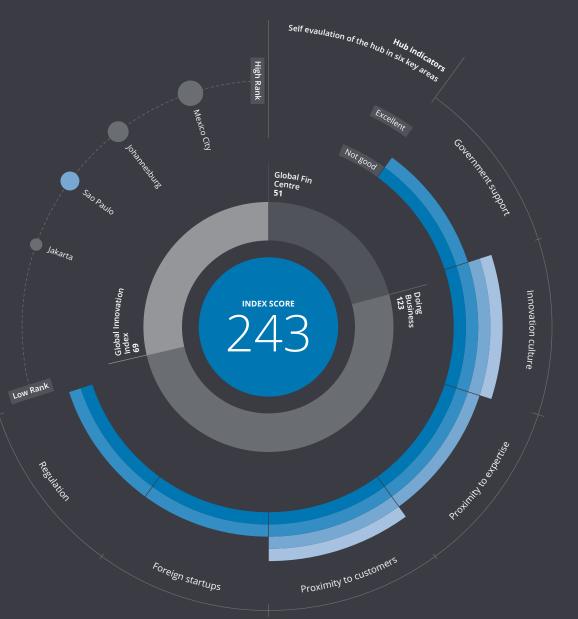
The future

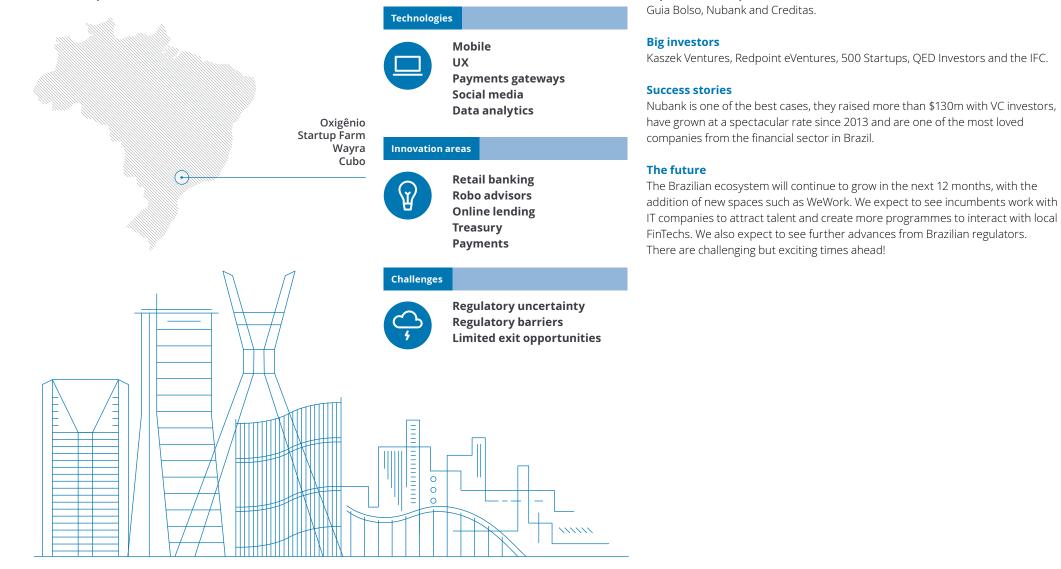
The next 12 months will see increasing recognition from governments and regulators that FinTech is here to stay. In particular, we expect the new PSD2 regulation from January 2018 to offer significant opportunities for many of the local FinTechs and to spark discussions with policymakers and regulators.



The Brazilian FinTech Scene is booming. With around 220 startups and VC investment reaching US\$161 million in 2016, Brazil currently has more FinTechs and FinTech investment than any other country in Latin America. In the last couple of years, many of the country's financial institutions have invested in FinTech by providing investments, support and workings spaces. The Brazilian financial authorities are watching this sector closely and are studying regulatory models from other parts of the world to further create their own regulation in this field.

Hub representative Fintech Committee at AB Startups CEO Bruno Diniz





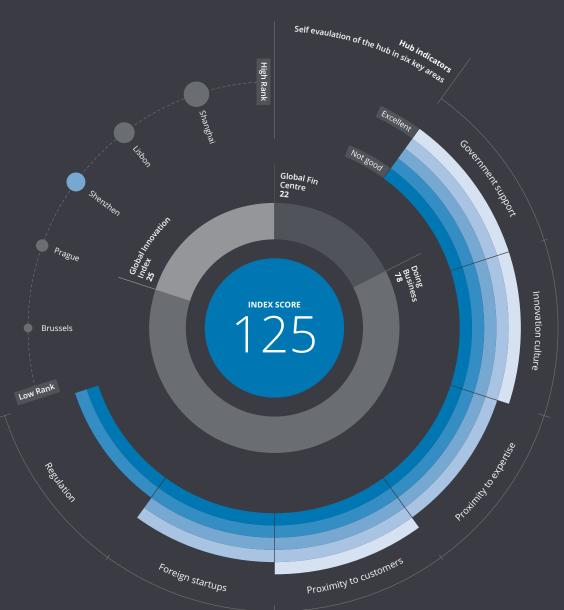
Top FinTech companies

Hub features



Shenzhen is located in a special economic zone and is known as the "Silicon Valley of China". It ranks first in China for the volume of patent filings and is also the heart of the Internet of Things (IoT) manufacturing world. The government has ambitious plans and policies to support the development of the fintech industry.







Hub features

Top FinTech companies

Viewtran Group Inc (Nasdaq: View), Ibox Play – mobile payment and Webank – China's first online-only bank.

Big investors

Tencent, Legend Capital, Hony Capital, Fortune VC and SILK Ventures.

Success stories

Tencent is an inspiring story of how a small internet company became one of the most popular and leading FinTech companies in China and has revolutionised China's FinTech industry. WeBank of Tencent is China's first private commercial bank and online-only bank.

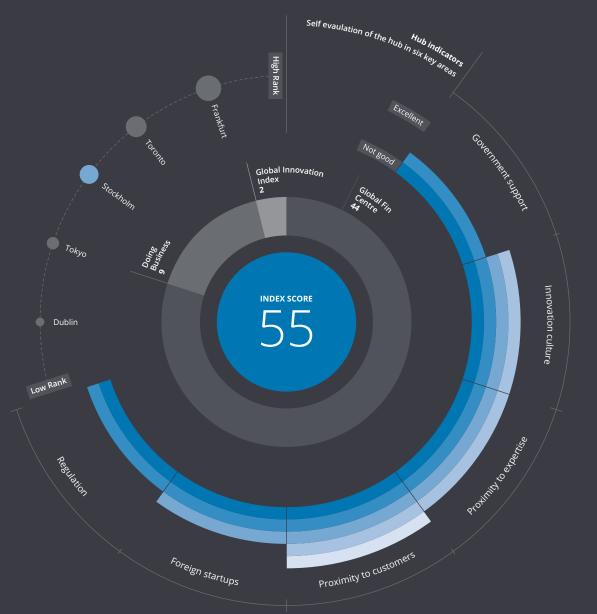
The future

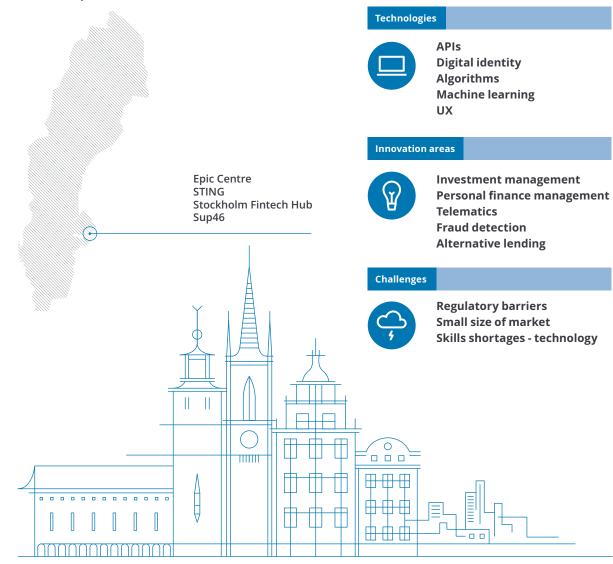
While innovation and FinTech is 'cool' in Europe, it is essential in China and a backbone of the economic development. The remarkable funding and progress in Shenzhen FinTech has been driven by a lack of financial infrastructure and a rising middle class demanding more convenience. With full support from the local government and a large unbanked population, there is significant future growth potential in the next 12 months and beyond.



Stockholm has produced the most highly valued technology startups per capita, second only to Silicon Valley as a region. For financial technology companies, Stockholm attracts about one fifth of all investment in Europe. Stockholm hosts several high profile FinTechs such as Klarna and iZettle and is becoming a hub for blockchain and bitcoin technology. Stockholm's strength in technology companies stems from its early and extensive digital infrastructure, international business mindset, strong technology education and fluency in English as well as other European languages.

> Hub representative Stockholm FinTech Hub CEO Matthew Argent





Hub features

Top FinTech companies

Klarna, iZettle, Trustly, Tink and Bima.

Big investors

NFT Ventures, EQT Ventures, Creandum, Northzone, Moor Capital and Industrifonden.

Success stories

Klarna, an e-commerce company that provides payment services for online storefronts is one of Europe's fastest growing companies. iZettle offers FinTech solutions for small businesses, including payments, point of sales, funding and partners applications.

The future

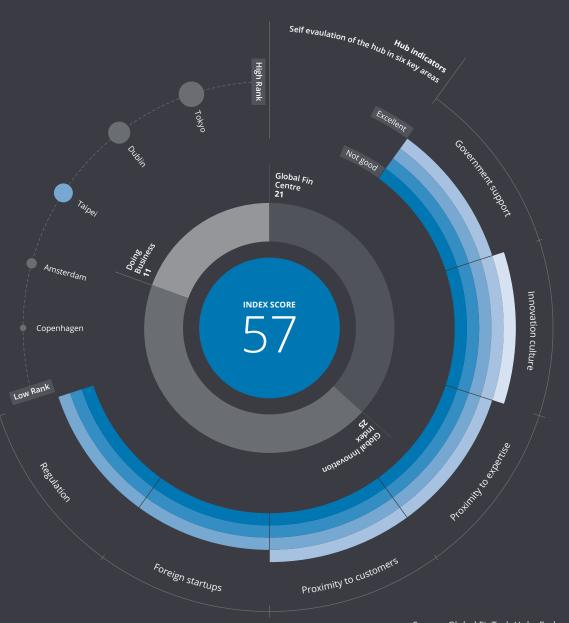
The next 12 months look very positive for Stockholm. We anticipate strong growth in the number of FinTechs, particularly in the B2B, fraud detection, insurance and machine learnings spaces, and stronger investments from VCs setting up and investing in Stockholm.

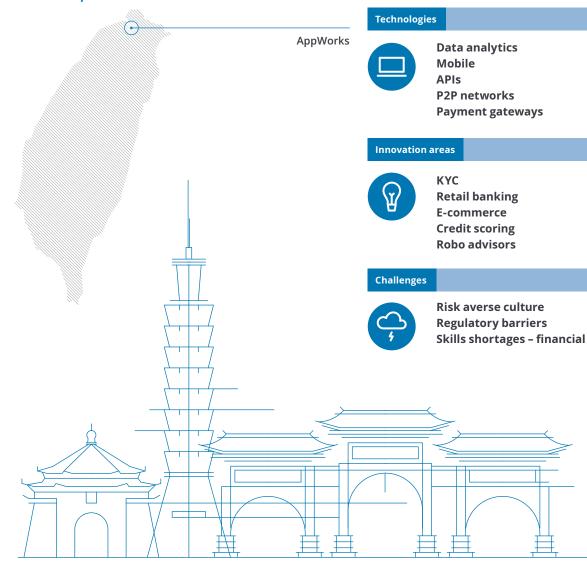


Taipei is the capital and the financial centre of Taiwan with over 1900 financial institutions established in the city. It is also a powerhouse for the IT industry and have cultivated numerous tech talents in the past 30 years. In addition to its strong "Fin" and "Tech" foundations, other ingredients such as strong government support, location, and fluency in Mandarin and English, have led many to target Taipei as a hidden jam in global FinTech markets.

> Hub representative Taiwan Financial Services Roundtable (TFSR) – FinTechBase

> > **CEO** Dr. Jun-ji Shih





Hub features

Top FinTech companies

Fugle, Tixguru, Aimaizing, Maicoin, Addweup and Soundnet, Airsig.

Big investors

Financial Technology Development Fund and National Development Fund.

Success stories

Founded in 2014, Airsig has developed the first air signature authentication technology in the world and filed nine patents across Taiwan, China and the U.S. Attracted by its high-quality authentication and control capability, the manufacturing giant Foxconn had invested Airsig with \$2 million, and impel Airsig's market value to \$20 million within 3 months since its launch. Airsig's unique authentication solution also makes two major banks in Taiwan become their customers and lets it join the FIDO Alliance in 2017.

The future

In the next 12 months, we expect to see more connections between Taiwan and other international hubs; as well as more foreign startups entering Taiwan. We will also see a stronger FinTech talent pool in Taiwan with the launch of a FinTechBase Learning Passport and learning resume.

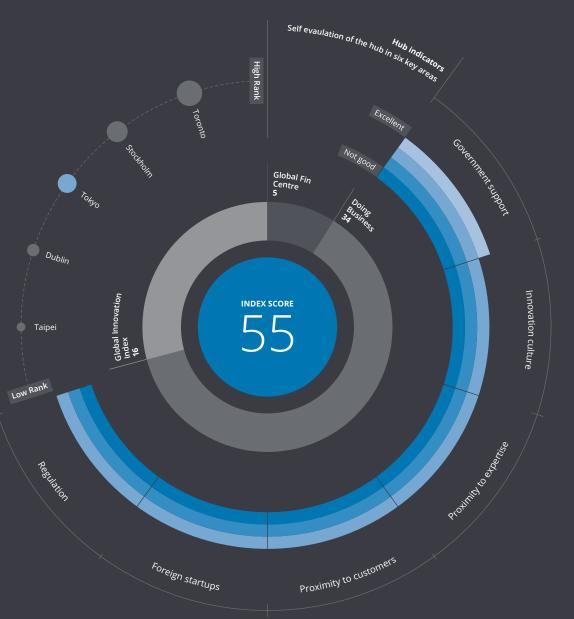
A tale of 44 cities | Tokyo



Japan has seen strong growth in the FinTech ecosystem in the past two years, as FinTech startups, industry players, regulators and government have collaborated to build a sustainable and scalable environment for innovation. Tokyo has a vibrant FinTech network, and the regulators have recently launched FinTech-friendly laws around blockchain and APIs, along with initiatives to support new FinTech startups. As the third largest economy in the world, there is opportunity for both B2C and B2B players to enter the market.

> Hub representative FinTech Association of Japan

> > CEO Hiroki Kudo & Hiroki Maruyama



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Hub features

Big data Cloud computing APIs Machine learning Banking-as-a-service

Finolab MUFG Digital Accelerator Nomura Accelerator Program The Dots



Innovation areas

Personal Financial Management Back-office operations (incl. Accounting) Retail banking E-commerce Robo advisors

Challenges



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Risk averse culture Low access to capital Limited exit opportunities

Top FinTech companies

Money Forward, Bitflyers, Freeee, Money Design, Moneytree.

Big investors

Internet based securities companies such as SBI, Rakuten and Monex, incumbents commercial and regional banks, Globis Capital Partners and JAFCO.

Success stories

Metaps, the company known for its app monetisation products and Spike, a fast-growing online payment solution, went public in August 2015. The company logged a market capitalisation of JPY 32 billion (\$263 million) on its first day.

From an ecosystem perspective, the "FinTech Japan 2016" and FinSum2 events held last year were strong success stories for Japanese FinTech as it brought together innovators locally and globally to facilitate discussion around building a collaborative ecosystem.

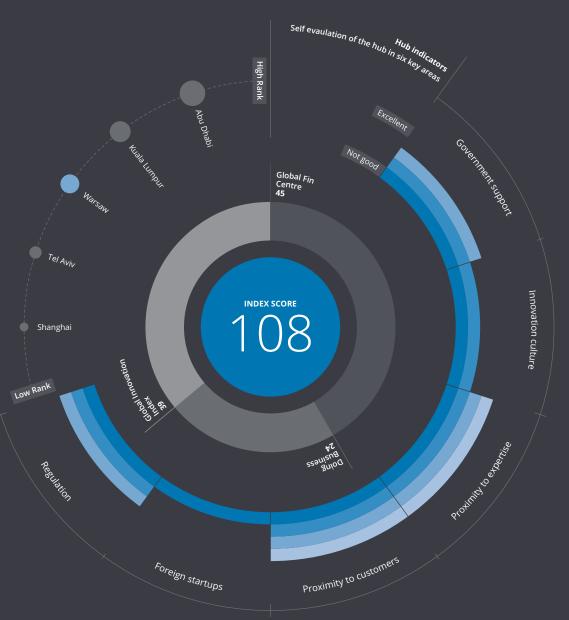
The future

FinTech was still emerging as a concept in Japan in 2016. However, 2017 and 2018 will see FinTech becoming mainstream as more financial institutions launch FinTech services and solutions. The FAJ is already putting pressure on banks to innovate and with this we expect to see more funding in FinTech, a growth in the number and diversity of startups (especially in infrastructure and B2B plays), as well as growth in the number of cross-border FinTech accelerators, innovation hubs/platforms. We also expect to see some FinTech exits in the next 12 months.



Poland has a vibrant financial innovation environment and is home to a number of global FinTech companies such as Azimo and Atsora. As a key outsourcing centre for many of the world's tier 1 banks, Poland's banking sector also has an opportunity to leapfrog other mature markets in Europe. Warsaw is the leading financial centre in Central and Eastern Europe and the recently approved Government Economic Strategy lists FinTech as one of the strategic sectors with the potential to become a driver of the Polish economy in the future.

> Hub representative FinTech Poland CEO Pawel Widawski





Hub features

Digital identity Machine learning Platform architectures

Back-office operations Foreign exchange

Low levels of knowledge Low access to capital Limited exit opportunities

Top FinTech companies

PayU, Blue Media, Polish Payment Standard (Blik), Currency One, Cinkciarz.pl, Finanteg, Ailleron, VoicePIN, ZenCard, Atsora, mBank and IdeaBank.

Big investors

MCI Ventures, SpeedUp Group, mAccelerator, PZU Witelo, Hard Gamma Ventures, Innova Capital, Luma Ventures and PFR / Polish Development Fund.

Success stories

The BLIK system, provided by the Polish Payment Standard, is an example of a sector-wide financial innovation. BLIK, an initiative by the six biggest Polish banks, started as a system of mobile payments and ATM cash withdrawal but now also offers instant money transfers among BLIK users and soon will enable contactless NFC payments.

Other success stories in our hub include the widespread adoption of Pay-By-Link, emergence and uptake of online exchange platforms and the acquisition of ZenCard by PKO Bank Polski SA.

The future

The FinTech ecosystem in Poland will continue to grow over the next 12 months. We expect to see new acceleration programmes from banks and dedicated FinTech funds. Warsaw will continue to strengthen its position as a financial centre for CEE and key European nearshoring centre for global institutions. We also expect to see changes in local regulation to better support financial innovation and measures to further attract talent and companies into Poland.

Amsterdam Bangalore Brussels Dublin Frankfurt Hong Kong Johannesburg London Luxembourg City Mexico City Nairobi New York Paris Shanghai Silicon Valley Singapore Sydney Tel Aviv Toronto Zurich

Old Hubs...

Old hubs

The following section presents 20 of the 21 FinTech Hubs included in the inaugural **Connecting Global FinTech: Hub Review 2016** report for reference.

As noted within the Methodology section, we updated the Index Performance Scores with recent data. However, the self-evaluation and narrative data remain largely unchanged, except where Hub Representatives have changed.

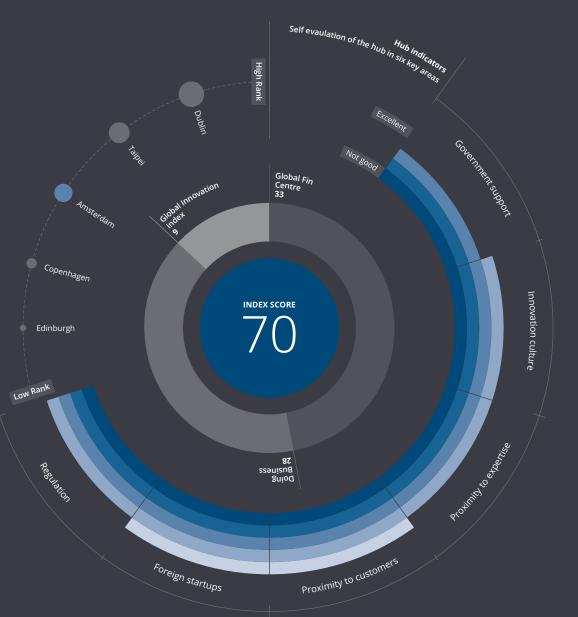
Seoul (South Korea) has been removed from the section below as there are currently no GFHF participants in South Korea.

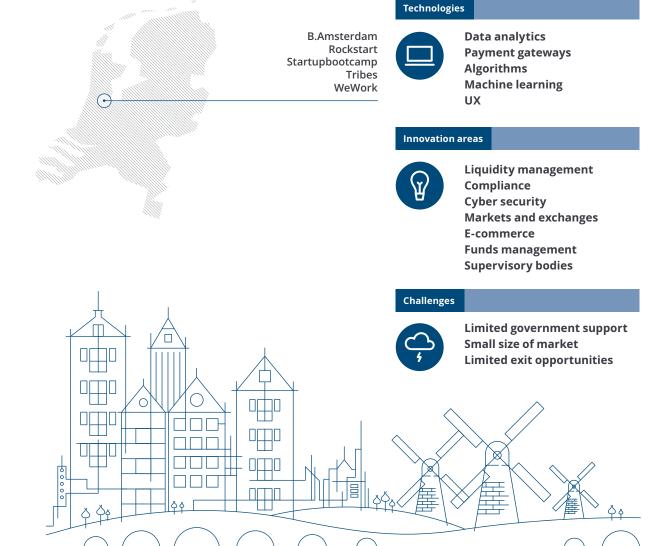
The analysis in this section should be read in the same way as for the New Hubs, set out on page 23.



The Netherlands has one of the strongest entrepreneurial environments in Europe, a strong talent pool, and several technology hubs in close proximity to each other. The FinTech hub is growing, and regulators are up to speed and are accessible. The financial ecosystem is mature and payment transaction costs are low. These factors make Holland a hospitable testing ground for startups.







Hub features

Top FinTech companies

GlobalCollect, Payvision, Backbase, Five Degrees, Flow Traders, Adyen.

Big investors

GlobalCollect, Payvision, Backbase, Five Degrees, Flow Traders, Adyen.

Success stories

Founded in 2006, Adyen set out to build a technology solution capable of meeting the rapidly evolving needs of today's fast growing global businesses. By 2013, \$14bn in transaction volume was processed on the Adyen payments platform, reaching \$25bn in 2014 and \$50bn in 2015.

The future

FinTech will be embraced by both politicians and corporations. There is good collaboration between government research institutions and corporates to bolster competiveness of the Hub. FinTech in the Netherlands also fosters relationships with international hubs with a view to becoming a gateway to continental Europe.

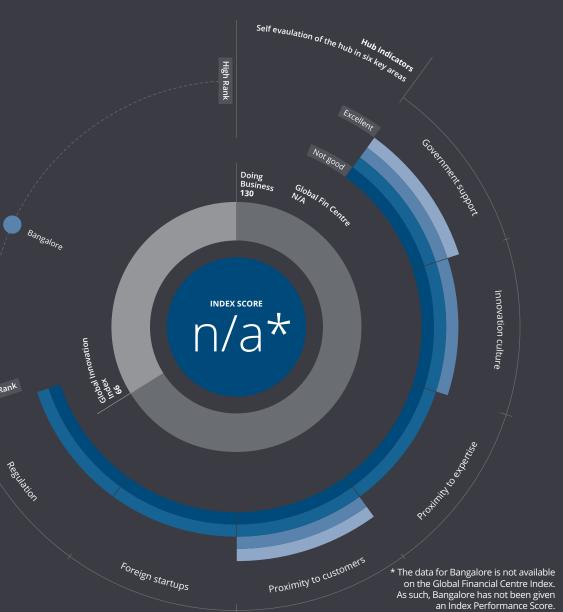


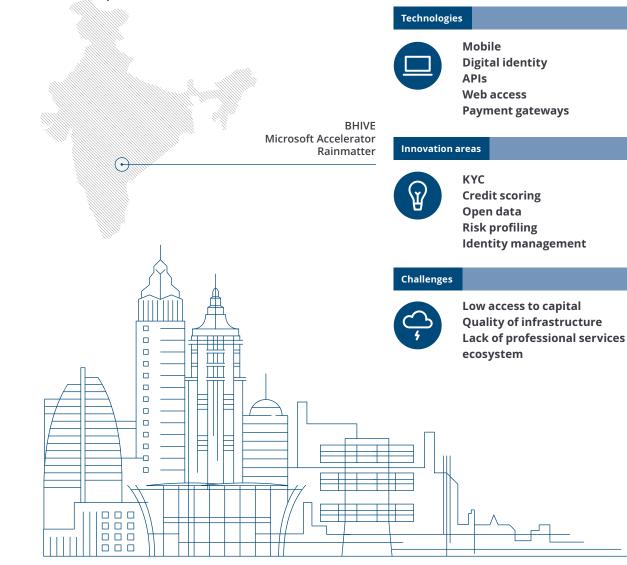
The Indian FinTech ecosystem has a high volume of technical expertise and a low cost of entry. There is an extensive talent pipeline which is inexpensive and accessible. In addition, government programmes have been developed to make it easy for startups to do business as well as providing them with financing and tax benefits.

> Hub representative Nathan Associates India

> > Principle Howard Miller

Low Rank





Hub features

Top FinTech companies

PayTM, FINO, PAytech, Citrus Pay, Bill Desk, Freecharge, MobiKwik, BankBazaar, PolicyBazaar, Capital Float, SME Corner.

Big investors

Sequoia Capital, 500 Startups India, SAIF Partners, Tiger Global, IDG, Accel Partners, Ascent Capital, Bain, Basil Partners.

Success stories

PayTM and mobile wallet/payments providers are rapidly expanding digital payment infrastructure.

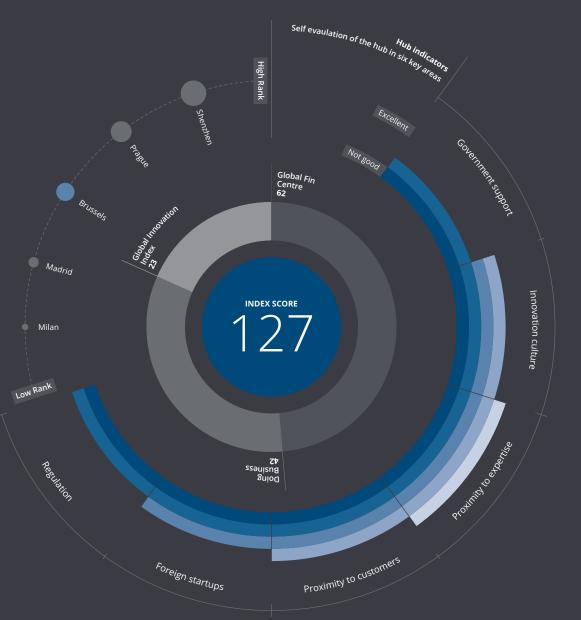
The future

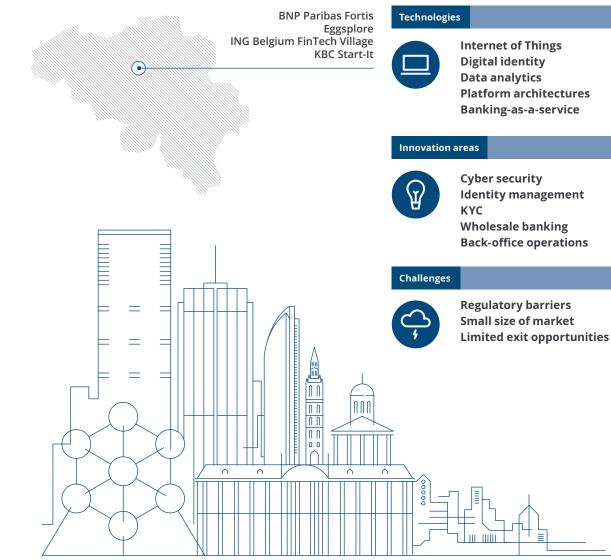
The next phase of FinTech in India will see the emergence of new types of blockchain extensions and other distributed ledger technologies, continued progress towards digital financial inclusion by 2020 and developments in next-generation payments. Enabled by the India Stack, India will also see the emergence of non-payments FinTech companies – alternative lenders, alternative credit scoring, and artificial intelligence.



Since the 1970s, FinTech utilities such as SWIFT have established their base in Belgium, as a result of its favourable investment and tax environment, international talent pool, and central location within Europe. Brussels hosts the headquarters of some of the world's largest financial players (such as Euroclear and MasterCard's European headquarters). It also houses the European Commission, and is at the heart of the European regulatory system.

> Hub representative B-Hive (formerly Eggsplore) CEO Wim de Waele





Hub features

Top FinTech companies

CashForce, Doccle, Guardsquare, Silverfin, Xpenditure, Twikey, Sixdots (Belgian Mobile Wallet), Sign2Pay, Koalabox, The Glue, Gambit, Edebex.

Successful scale-ups and more mature companies: Intix, Unified Post, Ingenico (previously Ogone), Isabel, Worldline, NG Data, Sopra Banking, Vasco Data Security, Clear2Pay (now FIS).

Big investors

SmartFin Capital, PMV, GIMV, Volta Ventures and Capricorn Ventures.

Success stories

All major financial services players, whilst competitors in the marketplace have jointly developed a community within the emerging FinTech scene, collaborating on tangible strategic programmes such as identity management, KYC, and the impact of the Internet of Things.

The future

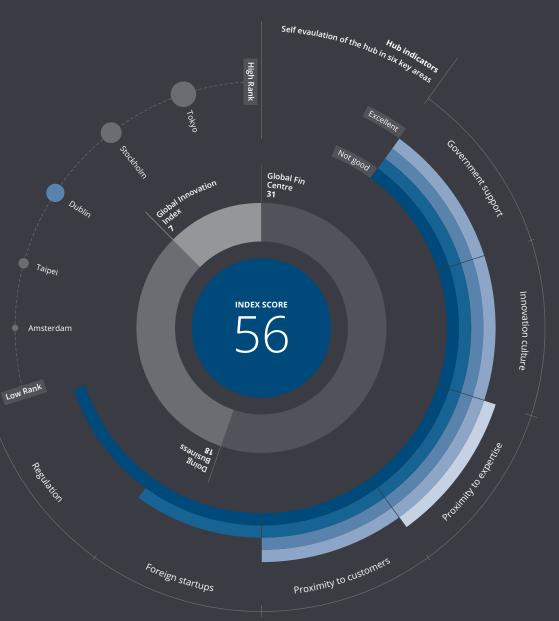
The Ministry of Finance has initiated a digital task force to work on a digital master plan for the region, which will be put into action and law over the next six months. The task force focuses on three main objectives: a digital first strategy based on identity management, a Cyber security and privacy strategy, and the creation and support of an entrepreneurial community.

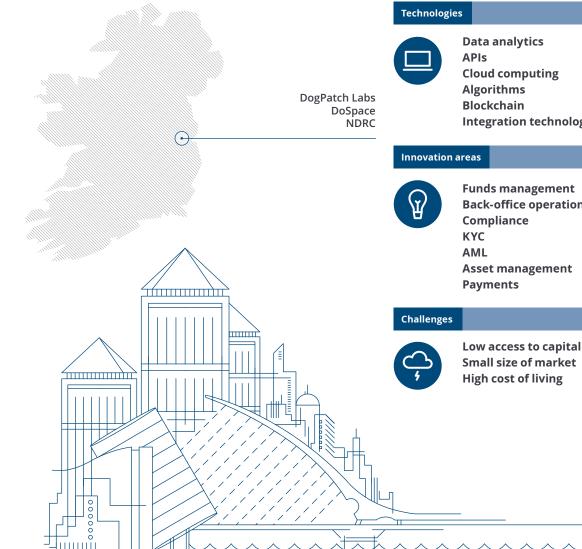
Key financial and technology players have expressed their support in promoting and building the Belgian digital finance ecosystem.



Ireland's low corporation tax of 12.5% is attractive to global firms locating there. A high concentration of regulatory (RegTech) focused startups are based in Dublin to tackle challenges in supporting the city's numerous fund management servicing businesses. Technology firms including Google and Facebook, have selected Dublin as their EMEA headquarters, resulting in high concentrations of tech savvy talent who understand global business models.







Hub features

Integration technologies

Back-office operations Asset management

Top FinTech companies

Realex, Fenergo and FundRecs.

Big investors

Enterprise Ireland, Frontline Ventures, Kernal Capital, Dermot Desmond.

Success stories

Realex Payments acquired in March 2015 by Global Payments in a deal estimated at €115m.

FundRecs, founded in 2013, set out on a mission to develop the most efficient, powerful and cost effective reconciliation software available. In 2016 they were named European Startup of the Year at the ICT Spring Conference in Luxembourg.

Fenergo is quickly becoming the industry standard for Client Lifecycle Management solutions. In 2015, they secured \$85m in funding from Insight Venture Partners and Aquiline Capital Partners to accelerate their global footprint.

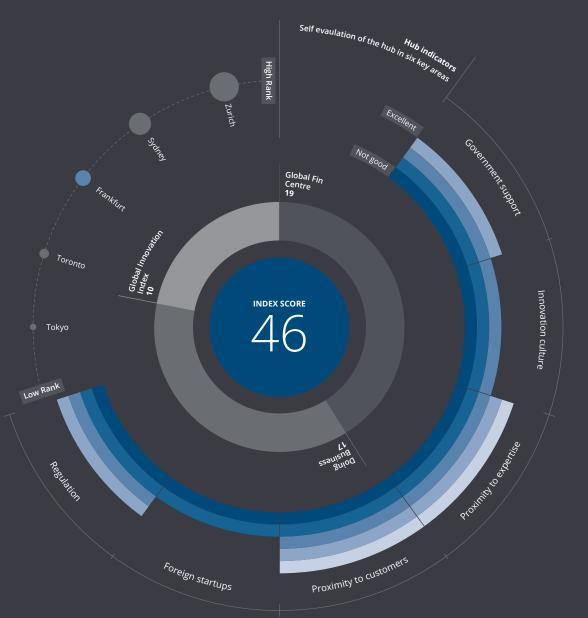
The future

Ireland will see the continued development of the FinTech ecosystem. It is also expected that Dublin will enhance its position as a global financial centre, with the ability to attract companies and people due to attractive government programmes.



Frankfurt is a hotspot for FinTech with over 300 banks located in the city. It also hosts the largest Stock Exchange in Continental Europe, Deutsche Börse Group. All the ingredients for a successful FinTech ecosystem are located within a few square kilometres: a vibrant startup scene, investors, talent, financial institutions, regulators, and a large network of service providers with expertise in regulatory issues and government support. Within Frankfurt Rhine-Main, Darmstadt also features a leading European hub for IT and Cyber security.

> Hub representative Frankfurt Main Finance CEO Hubertus Väth



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Hub features

Technologies



Blackprint Booster Deutsche Börse FinTech Hub Deutsche Gründer Akademie Die Zentrale Coworking FinLab Frankfurt Accelerator Goethe-Universität Gründermaschine Highest Mainincubator Start FFM Tech Quartier, Frankfurt Unibator / Campus Westend VABN Frankfurt

JUL





Invesmtent management Capital markets & exchanges Insurance Cyber security Identity management / KYC

Challenges



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Limited number of foreign VCs Limited international awareness Risk aware culture

Top FinTech companies

360T, Authada, Awamo, Ayondo, Blockchain Helix, Brainbot, Clark, CreditShelf, Diversifikator, Fincite, FinTech Group, Ginmon, Peermatch, Savedroid, Traxpay, Paydirekt, Vaamo, WebID etc.

Big investors

Acxit Capital Partners, Augur Capital, Aurelia Private Equity, Brockhaus PE, CommerzVentures, Creathor Venture, Deutsche Börse, FinLab, Hauck & Aufhäuser, Heliad Equity Partners, HR Alpha Venture Partners, KfW Bankengruppe, Main Incubator, Omnis Mundi, Quadriga Capital, Sirius Venture Partners, TEV Global Invest, ValueNet Capital Partners, VCDE Venture Partners.

Success stories

FX trading platform 360T exit to Deutsche Börse for €725m (July 2015). €13m Series A funding of Clark. KKR \$55m funding of artificial intelligence company Arago AG.

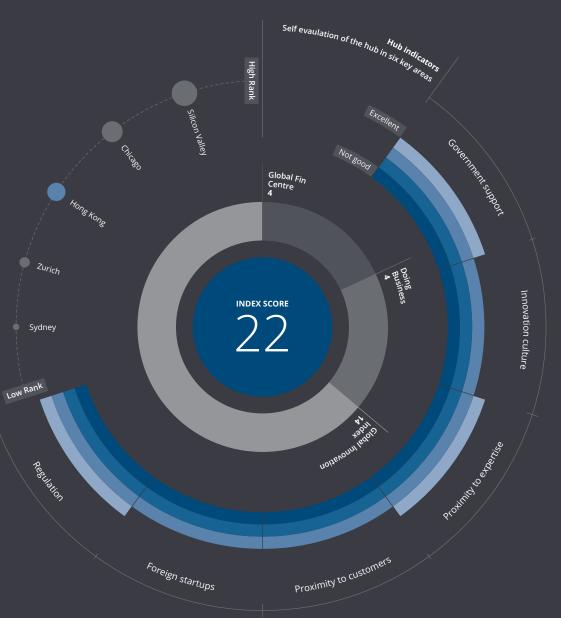
The future

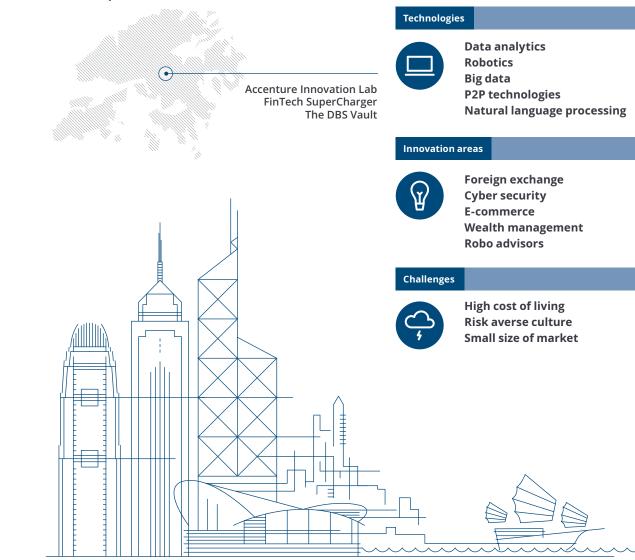
We are likely to see the opening of further international accelerators in Frankfurt. More national and international FinTech companies will move to Frankfurt, strengthened by the BREXIT discussion. They benefit from proximity to (1) major EU regulatory bodies, (2) German and foreign banks and (3) 4 mio. German SMEs (the so-called Mittelstand) as potential clients.



Hong Kong has the natural branding of Asia's largest financial centre. This provides an immediate attraction for FinTech and has driven its development in recent years. Hong Kong's position as Asia's super connector is particularly useful for B2B solutions. Furthermore, its historical proximity to China makes it hard for other hubs to displace Hong Kong.







Hub features

Top FinTech companies

Amareos, Neat, Gatecoin, microcred, 8 securities, Aidyia, AMP CreditTechonologies, WeLend, Ironfly Technologies, Nexchange.

Big investors

Arbor Ventures, Nest VC, Horizons Ventures.

Success stories

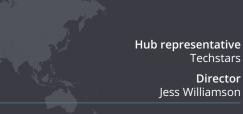
WeLend, operated by WeLab, is Hong Kong's leading online lending platform. In 2015 WeLab won Hong Kong's Tech Company of the Year Award, and in 2016 they raised over \$150m. WeLend generates HK\$4.5 bn in applications as of July 2016.

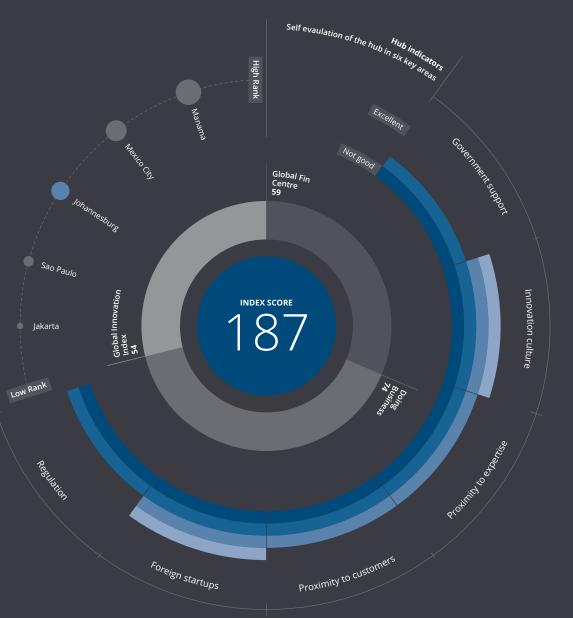
The future

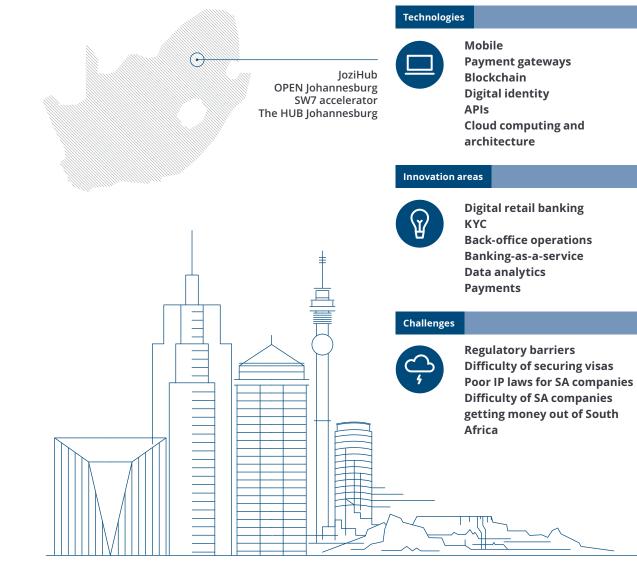
Hong Kong will focus on its core competitive advantage as a B2B platform for regional expansion. Likewise it provides a base for outbound mainland Chinese companies to scale in Asia and potentially expand into Europe through acquisitions.



South Africa is a key FinTech Hub connecting the African continent with the rest of the global ecosystem. It is often an entry point for international firms doing business on the continent. As there are a number of banking headquarters in South Africa, it is naturally a FinTech powerhouse. The startup community spans Johannesburg, Cape Town, and beyond, where innovations are aimed at creating better services for low-income consumers, as well as for the banked and underbanked.







Hub features

Top FinTech companies

SnapScan, RainFin, Yoco, Peach Payments, WizzPass, PriceCheck (acquired by NASPERS), PayU.

Big investors

Silvertree, NASPERS, Perry Blacher (Amadeus), Barclays Seeker Fund, 4Di Group, Hasso Plattner Ventures.

Success stories

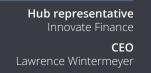
SnapScan has simplified the way consumers pay for items, using the prevalent mobile phones. From parking guards to food trucks, this startup's 20 000 QR payment codes are all over SA.

The future

The South African startup community is becoming more attractive and palatable to international investors. We expect more foreign venture capitalists to take risks here, thereby creating greater competition with existing South African VCs and ultimately better terms for startup founders. Johannesburg is expected to strengthen its bridges with Cape Town and build connections with the regional and global FinTech community.



London has the world's largest financial services sector, supported by a booming tech sector. The ecosystem has the "Fin" of New York, the "Tech" of the US West Coast and the policymakers of Washington, all within a 15 minute journey on public transport. These factors make London one of the greatest connected global cities in the world with the key ingredients for digital success: capital, talent, regulatory and government support and demographic diversity.







Hub features

Technologies Mobile Algorithms Web access Connectivity **Banking-as-a-service**

Innovation areas



Capital markets Neo bank Retail banking Foreign exchange Wealth management

High cost of living High cost of office space High cost of labour

Top FinTech companies

Atom Bank, Azimo, Clear Score, Crowdcube, Currency Cloud, Digital Shadows, DueDil, Ebury, eToro, Funding Circle, Go Cardless, Iwoca, Kantox, LendInvest, Market Invoice, Monzo, Nutmeg, Property Partner, Ratesetter, Revolut, Seedrs, Starling Bank, Syndicate Room, Tandem, Transferwise, World First, World Remit, Worldpay, Zopa.

Big investors

Accel, Anthemis, Augmentum Capital, Aviva Ventures, Balderton, Brightbridge Ventures, Illuminate Financial, Index, Northzone, Octopus, Passion Capital, Santander InnoVentures.

Success stories

Worldpay raised an IPO in 2015 becoming the largest UK FinTech IPO to date and became the largest tech IPO of 2015. This demonstrated that the UK is not only a great place to start a FinTech business, but that the UK has all the resources to help companies to scale, be successful and achieve a world class exit.

The future

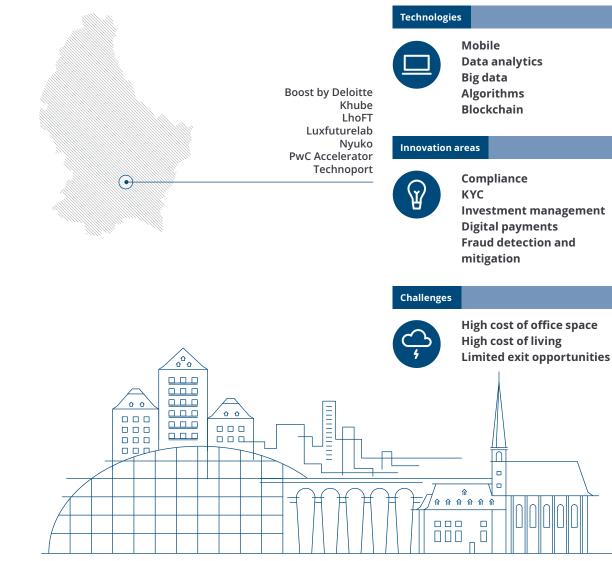
Over the next 12 months the UK will forge greater global FinTech connections to support the developed ecosystem in the UK. FinTech is global and UK FinTech firms have global ambitions which require global capital, talent and partnerships to ensure long term success.



Luxembourg is Europe's leading investment fund centre and home to more than 140 international banks and 150 FinTech companies and over 10,000 people working in the sector. The city is also host to multiple accelerators, which are managed by top financial players such as BNP Paribas. In parallel, the government is particularly accessible and supportive, offering extensive R&D grants, the implementation of a highly efficient IT infrastructure and specific regulations adapted to the financial services sector.

> Hub representative Luxembourg for Finance CEO Nicolas Mackel





Hub features

Top FinTech companies

Mangopay, Multifonds, Amazon Payments, iDetect, Bitstamp, Fundsquare, SIX Payments Services, Investify, PayCash, APS.

Big investors

SNCI, Chameleon Invest, Docler Investments, Mangrove Capital, LBAN, 360 Capital, Saphir, GGM Capital, Sting.

Success stories

Launched in 2012 MangoPay, the payment API provider, now supports more than 1,000 platform customers across 22 countries in Europe. In 2015 it processed €200 million worth of payments.

Bitstamp is a bitcoin exchange, allowing trading between USD currency and bitcoin cryptocurrency. As of 2016 it was the world's second largest by volume.

Digicash Payments, a mobile payment specialist, has had their technology implemented by 4 retail banks and has been deployed at a national scale in Luxembourg.

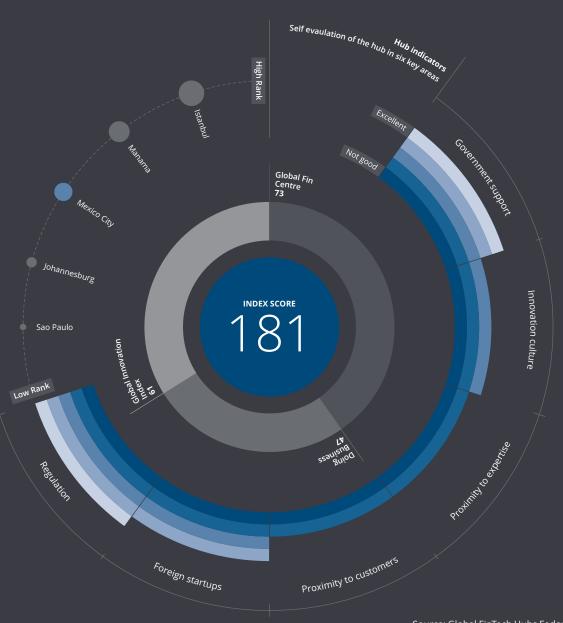
The future

The year ahead promises to be a very exciting one for Luxembourg, both with regards to improving the infrastructure that supports the FinTech ecosystem through the creation of the Luxembourg House of FinTech and services industry. This year, the Luxembourg investment funds association (ALFI) and banks association (ABBL) have established FinTech working groups of which FinTech companies are active participants. Thus, we expect that the collaboration in their daily operations.



There is a concentration of experienced founders along with deep pools of technical and business knowledge. This has attracted many entrepreneurs with experience from international hubs such as Silicon Valley. Moreover, Mexico is one of the largest consumer markets in the world with great scope to increase financial inclusion.







Hub features

Top FinTech companies

Kubo, MiMoni, Kuspit, Tan Tan, Kueski, Bankaool, Bitso, Bayonet, Clip, Broxel.

Big investors

Dalus Capital (Monterray) , 500 Startups (Mexico City), General Atlantic (Mexico City), UHNW family offices.

Success stories

Founded in 2012, Kueski is the leading online lending company in Mexico offering real-time, micro loans. It has grown more than seven times annually since launch, and has achieved better loss rates than a traditional credit card in Mexico. In 2016, they raised \$35m, with the potential to increase to \$100m in total funding, the largest capital funding for a FinTech startup in Mexico.

The future

Mexico is expecting new changes in FinTech law, which will open up the venture capital market and see an influx of international venture funds. This will complement the already strong ecosystem and increase competition within FinTech services.



Kenya is the best known FinTech Hub in Africa. It benefits from inflows of development money as one of the UN's major offices is located in Nairobi. The technical talent pool is maturing, with improvements in skills and development. Regionally, Kenya has a stable political environment and attracts FinTech companies from other parts of Africa, especially in the sub Saharan region.



Hub representative NEST Nairobi CEO Aaron Fu Low Rank

Regulatio

Proximity to customers
Proximity to customers
As such, Nairobi has not been given an

Mernment support

Innovation culture

Self evaulation of the hub in six key areas

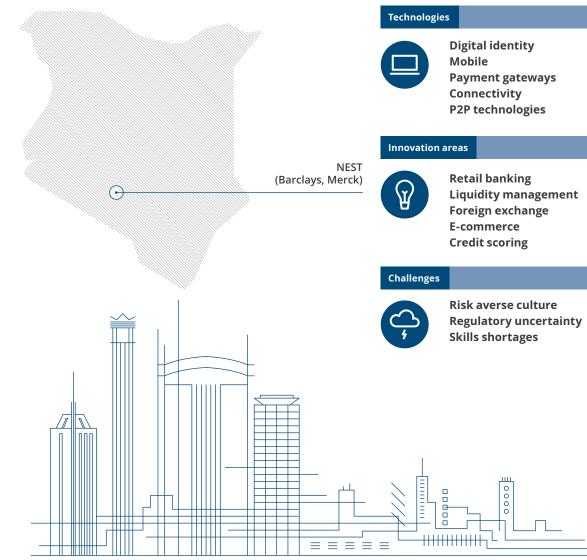
Doing Business **92**

INDEX SCORE

n/a*

Foreign startups

Index Performance Score. Source: Global FinTech Hubs Federation Produced by Deloitte



Hub features

Top FinTech companies Innova, Pesa Pal, KAPS LTD, Craft Silicon.

Big investors

Savannah Fund, NEST, Centum Investment, Novastar Ventures.

Success stories

M-PESA has revolutionised the way Kenya does business through its mobile money transfer system. Launched in 2007, 17 million Kenyans use M-PESA thanks to a simple text-based menu that is accessible on even the most basic mobile phone.

MODE provides instant nano-credit for pre-paid mobile phone users across Africa, founded in 2010, it now has operations in 31 countries with a customer base of over 250 million.

The future

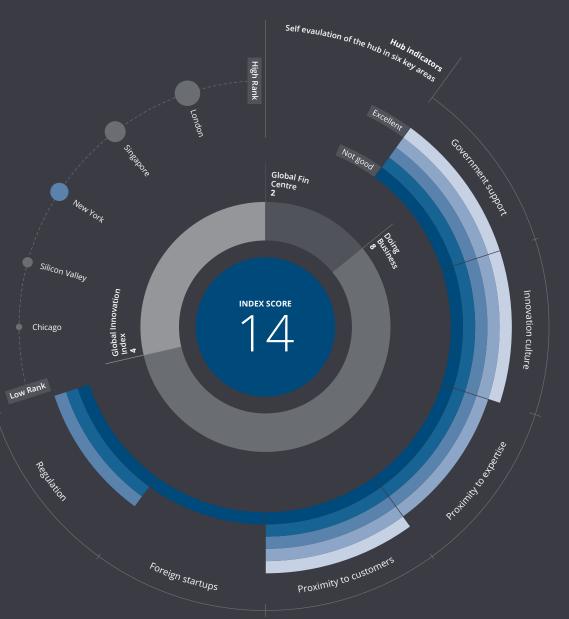
The technical skills gap between Kenya and other international FinTech hubs will narrow due to continued training and development provided by programmes such as Code for Africa. With some international banking groups decreasing their presence in Africa, this will free up larger pools of talent to enter the FinTech space.

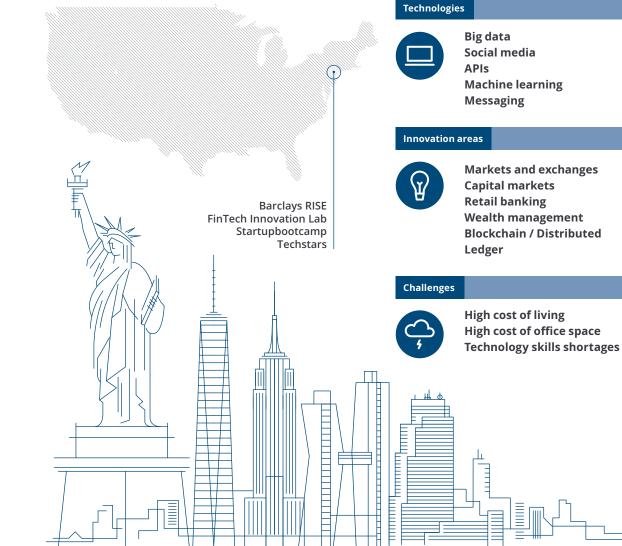


As a leading global financial hub, New York has some of the largest and most established financial services institutions actively investing in, and collaborating with, a myriad of FinTechs. With Wall Street having both the largest capital base and greatest need for FinTech innovation, the best technology and engineering talent have come together to create a vibrant and well-funded ecosystem within walking distance of the market they serve.

> Hub representative Partnership Fund for NYC

> > Director, FinTech Innovation Lab Sunny Parikh





Hub features

Top FinTech companies

Betterment, Digital Asset, Kickstarter, Learnvest, Common Bond, OnDeck Capital, Moven, Oscar, Kasisto, CB Insights.

Big investors

Bain, Nyca, First Round, Bessemer Venture Partners, IA Ventures, Norwest Venture Partners, Canaan Ventures, Silver Lake, Lightyear Capital, North Hill Ventures.

Success stories

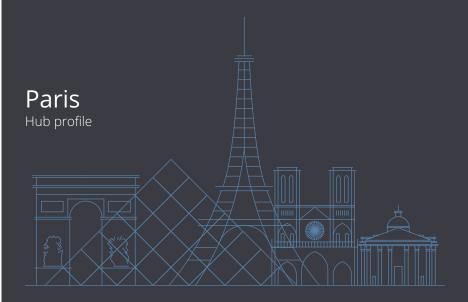
Founded in 2007, LearnVest provides award-winning financial planning systems. The company was acquired by Northwestern Mutual in 2015 for \$250m.

OnDeck, a lending platform for small businesses, has loaned over \$2bn to small businesses across 700 industries in all 50 states and Canada.

Betterment is an automated investing service. Over 120,000 customers have invested more than \$3bn with Betterment and in 2016 the company was valued at \$700m.

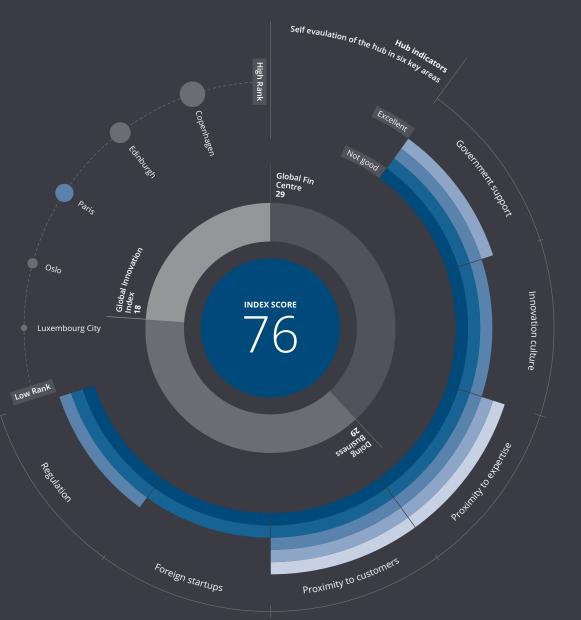
The future

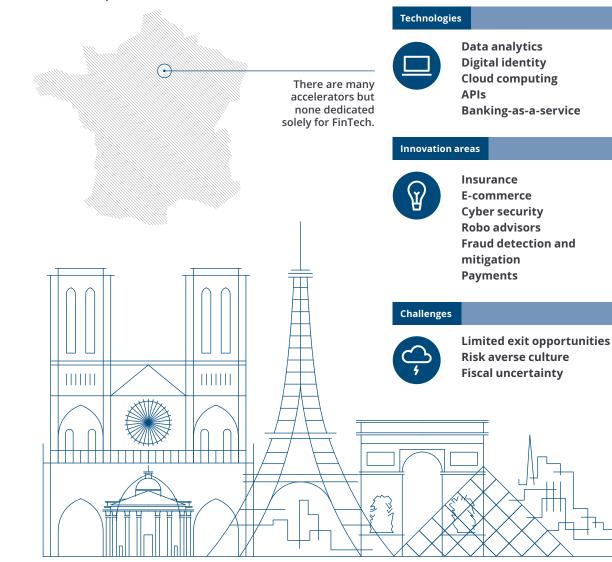
We will see a large number of FinTech companies adopt a collaborative approach by partnering with financial institutions in order to scale up their activities. There may also be growth through acquisition in more developed technology sectors.



France has comprehensive regulations with respect to FinTech, with clearly defined rules for companies looking to scale up. FinTech has strong governmental and ministerial support. Moreover, Paris is home to a high concentration of financial institutions and asset managers. There is strong infrastructure established in payments, insurance and telecoms with large pools of talent available.







Hub features

Top FinTech companies

Compte Nickel, Lendix, FinexKap, SlimPay, Leetchi, HIPAY.

Big investors

Partech Ventures, BpiFrance, BPCE Group, Credit Mutuel Arkea, XAnge Private Equity.

Success stories

In less than three years since its launch HiPay has reached 2bn Euros of transactions processed. The company has global coverage, with 60% of its activity outside its domestic market. It is the only FinTech in France to be publicly listed on the market.

Leetchi has become a key payment player in Europe in just a few years. Recently the most digital French bank, Crédit Mutuel Arkea, invested €50m in Leetchi to take 86% of the capital. The founding team is still fully in charge of leading the development of the company. A true example of co-opetition between a bank and a FinTech.

The future

The market will continue to mature. We will start to see more companies beginning to scale up by shifting from B2C (Business to Consumer) to B2B (Business to Business) activities. There will also be greater partnerships developing between startups and banking and insurance institutions.



China is the largest FinTech market in the world as measured by total investment, total addressable market, and digital usage. A digital savvy population along with an under-developed financial industry has opened up new opportunities for FinTech to make a significant impact.







Hub features

Top FinTech companies

Alipay, China PNR, Lu.com, ppdai.com, dianrong.com, Eastmoney.com, Wind Info, Zhong An Insurance.

Big investors

Sequoia Capital, IDG Capital Partners, Bank of China, CDH Investments, Wanda, Gome and Sunig, Guotai Jun'an Securities, Sinolink Securities, Fosun, SAIF Capital.

Success stories

Lufax, an online internet finance marketplace valued at \$18.5bn.

Zhong An Insurance, an Internet Insurance company, established by Ant FinancialServices, Tencent Holdings Ltd. and Ping An Group, valued at \$8bn.

The future

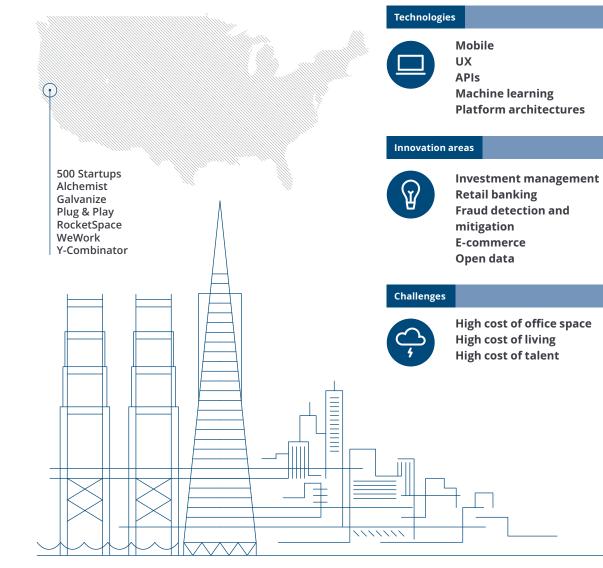
As the traditional financial hub in China, Shanghai will experience growth and consolidation as new FinTech segments come together. There is a strategy in place to construct a science and technology innovation centre and we expect to see growth in new technology areas such as virtual reality, biometrics, Big databased risk management, blockchain and AI. These will be supported by increased government support, improved regulatory environment and implementation of Free Trade Zone policies.

Silicon Valley Hub profile

Silicon Valley is synonymous with technology innovation, which is now aimed at FinTech. With a majority share of venture capital investment, a majority share of the executive leadership of global technology companies, and decades of demonstrated excellence in scaling companies from concept to global leadership, Silicon Valley consistently produces winners.







Hub features

Top FinTech companies

PayPal, Square, Credit Karma, Stripe, RealtyShares, Wealthfront, Coinbase, Ripple, Prosper, LendUp, SoFi, Affirm, Indiegogo, Motif.

Big investors

VCs: 500 Startups, Andreessen Horowitz, Sequoia Capital, SV Angel, Ribbit Capital, DFJ, Accel Partners, Khosla Ventures, CoreVC.

Corporate VCs: Google Ventures, Propel Ventures (formerly BBVA), AMEX Ventures, Citi Ventures, Wells Fargo.

Success stories

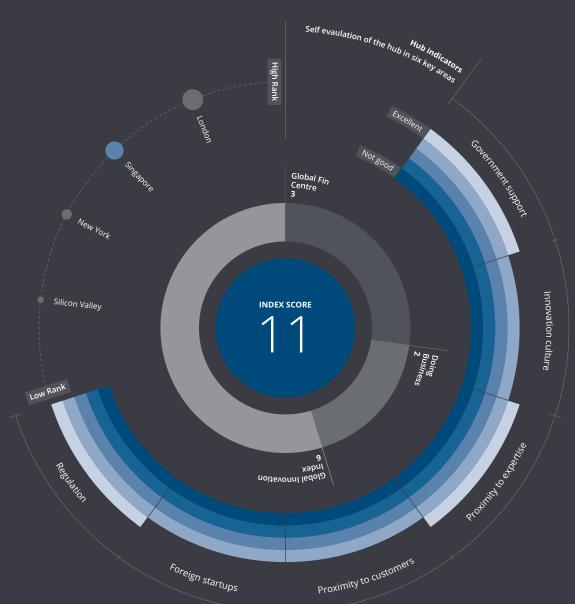
FinTech Unicorns: Stripe, SoFi, Zenefits, Credit Karma, PayPal and Square.

The future

Major institutions continue to bulk up their physical presence in the Valley, while industry stalwarts continue to shift their careers by taking on roles with innovative new startups. Talent will become more available with the downturn. There is a question globally of the availability of capital for emerging un-secured lenders, whether direct or marketplace. We will likely see increased FinTech activity by GAFA (Google, Apple, Facebook, Amazon). There will also be a steady state of FinTech investment and a rapid increase in InsurTech and RegTech investment.



Singapore is a leading international financial centre and a serious contender for the global number one spot in FinTech. Government support for FinTech is strong with S\$225m committed to the development of FinTech projects and proofs of concept. Other initiatives include the Regulatory Sandbox, Cloud Computing Guidelines, Strategic Electronic Payments, FinTech Office, MAS Innovation Lab, International Technology Advisory Panel and Talent Development.



Hub representative Monetary Authority of Singapore

> Chief FinTech Officer Sopnendu Mohanty



Allianz Digital Labs Aviva Digital Garage BASH Block 71 Citibank's Corporate and **Consumer Innovation Labs** Exellerator Fatfish MediaLab FocusTech Ventures HSBC's Innovation Lab InspirAsia Lattice80 Metlife's Lumenlab **Ocbc Open Vault** SPH Plug & Play Standard Chartered Bank's Startupbootcamp FinTech **TCF-PnP** Program The Joyful Frog Digital Incubator **UBS Evolve**

Hub features

Technologies



Innovation areas



Regulatory uncertainty

Underdeveloped startup

Risk averse culture

ecosystem

Challenges

_,

Top FinTech companies

Dragon Wealth, Call Levels, Fastacash, MatchMove Pay, MoolahSense, Crowdonomic, Otonomos, Fitsense.

Big investors

Full range of angel, VC, corporate venture divisions and government entities. Examples include: GIC, Temasek, EDBI, Singtel Innov8, Life.SREDA, 500 Startups, Sequoia Capital, Jungle Ventures, Golden Gate Ventures, Quest Ventures.

Success stories

MDAQ is backed by prominent investors, valued at over \$250m. Also, it is noteworthy that, as well as startups, incumbent financial institutions in Singapore are proactively embracing FinTech.

The move by the MAS to bring in industry talent to drive FinTech forward paid rich dividends and positioned the MAS as the leading regulator to drive progressive thinking in FinTech innovation.

The future

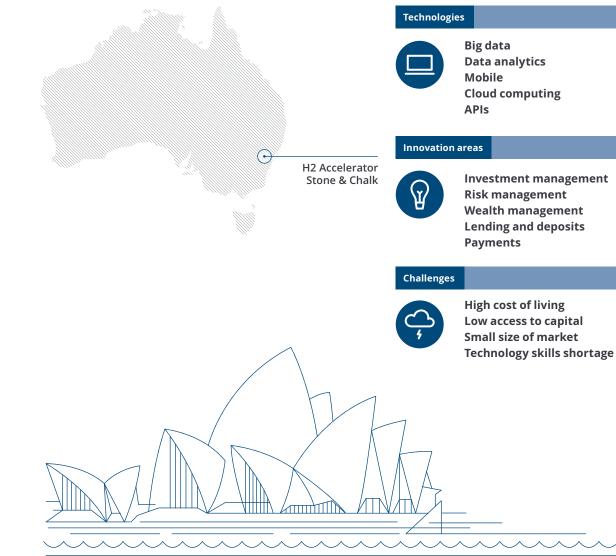
Singapore successfully hosted the FinTech Festival in November 2016. Initiatives being run and in the pipeline include: the Unified Point of Sales (UPOS) roll-out of terminals, Central Addressing System (CAS) payment technology, Trade Finance distributed ledger proof of concept, SoCash cash withdrawal technology, and Banking-as-a-Service.



Australia has robust wealth management and superannuation sectors and holds the lion's share of the customer base in its region. It is the gateway ecosystem into Asia, especially South Asia with many global banking brands setting up their Asian headquarters in Sydney. There is a deep and skilled talent pool with high levels of mobile penetration and internet banking.







Hub features

Top FinTech companies

Metamako, Data republic, Society One, Prospa.

Big investors

Sapien Ventures, NAB Ventures, Investec, Reinventure, Angel and High Net Worth Investor syndicates.

Success stories

Since its launch in 2015, Stone & Chalk have connected startups to \$100m AUD in seed and angel investment, and 23 corporates.

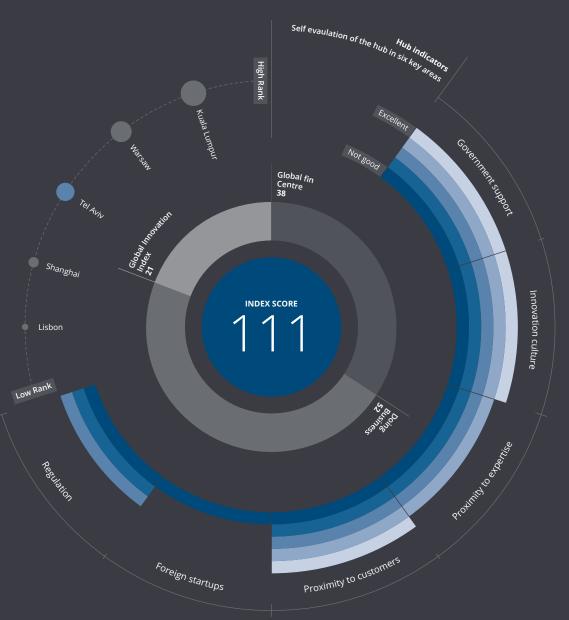
The future

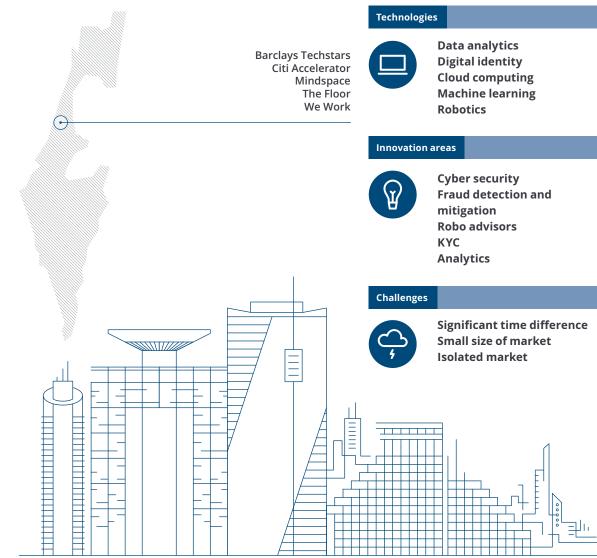
A big push in engaging with Asia. There will be more Asian companies setting up offices in Sydney and vice versa. There has been testing of APIs within the regulatory sandbox, which will now begin to be rolled out. There will also be further development of FinTech ecosytems in other cities in Australia.



The Israeli Hub is mostly known for its technological talent pool which includes special units of army-trained entrepreneurs who are bold, innovative and creative. Israel has a strong risk-taking spirit where failure is seen as an opportunity to learn, and there is an entrepreneurial hunger to succeed in scale. The fact that the Israeli market is very small creates ventures that design their products that cater to the European/US markets from the get-go.







Hub features

Top FinTech companies

Payoneer, Etoro, Sapiens, Credorx, Tipalti, Fundbox, Forter, Zooz, Personetics, Lemonade, Riskified, Behalf.

Big investors

Corporate VC's: Microsoft, Samsung, Intel, IBM, Deutsche Telekom, Cisco, Nautilus by AOL , 500 Startups.

Local VC's: Jerusalem Venture Partners, Magma Venture Capital, Carmel Ventures, Aleph, Pitango, 83North and many angel investors.

Success stories

CheckPoint is the largest pure-play security vendor globally and remains a leader in the 2016 Gartner Magic Quadrant for Unified Threat Management. They secure more than 100,000 businesses and millions of users worldwide and has the industry's highest malware catch rate.

Other success stories include FundTech which was acquired in 2015 for \$1.25bn and Payoneer which raised \$180m in October 2016.

The future

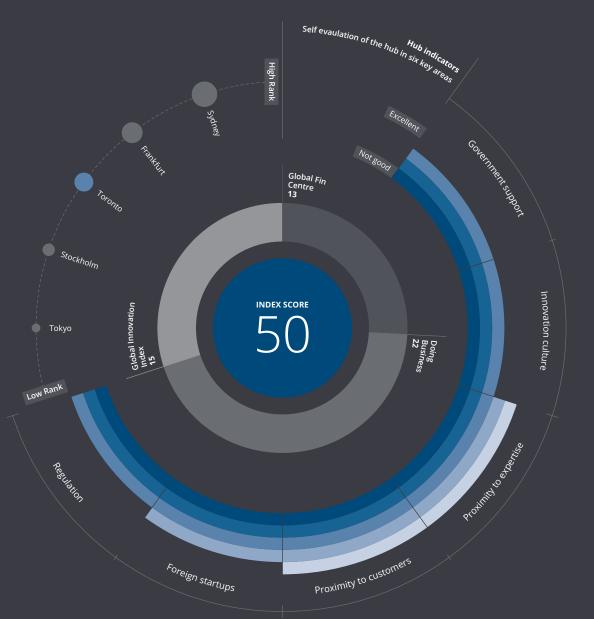
We foresee an increase in the number of venture capital-backed companies that focus on InsurTech and AI. Financial services will become more digital and digital banks, such as Pepper, will emerge. We expect the increasing number of foreign R&D centres being set up in Israel, e.g., JP Morgan R&D centre, to be a continuing trend.

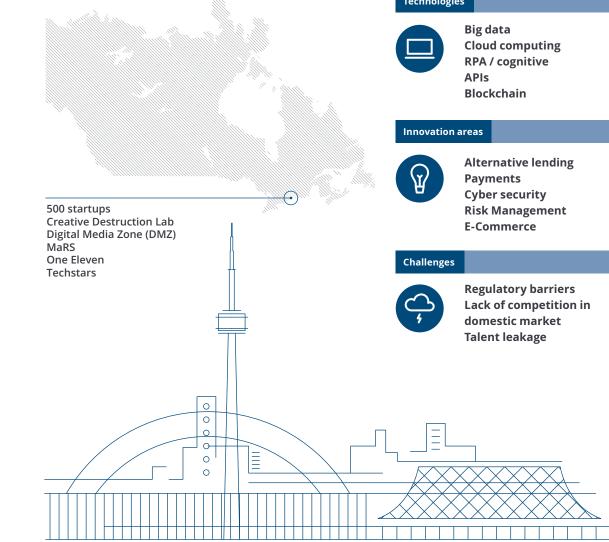
While Israel is a small and isolated market, it can be seen as an advantage in terms of international collaboration. It forces the local industry to focus on larger global markets. As such, the payments and trading systems that emerged in Israel are geared globally.



Toronto is recognised as one of the largest and most stable financial centres in the world that encompasses a diverse tech and academic community. Nearly 80% of fintech startups in Canada are Toronto-based and supported by government, private investors and the corporate community. Incumbent banks are dedicating 40-60% of their FinTech innovation budgets to areas such as artificial intelligence, cybersecurity and blockchain. Venture-capital financing in Canadian FinTech was up 74% from 2015 to 2016, its highest level since 2000. This growth continues to attract global banks, investors and startups that are looking to set-up shop and expand their FinTech innovation.

Hub representative MaRS Discovery District CEO Ilse Treurnicht





Hub features

Technologies

Top FinTech companies

FinanceIT, WealthSimple, League, Thinking Capital, Bioconnect, Zafin, Wave Accounting and Gold money.

Big investors

OMERS Ventures, Georgian Partners, Information Venture Partners, Business Development Bank of Canada (BDC), Investment Accelerator Fund (IAF) and Power Corporation of Canada.

Success stories

Founded in 2006, Shopify is an e-commerce company which provides software for online stores and retail point-of-sale systems. Shopify's initial public offering in 2015 valued the company at \$1.27 billion and today it has more than 1,750 employees around the world.

The future

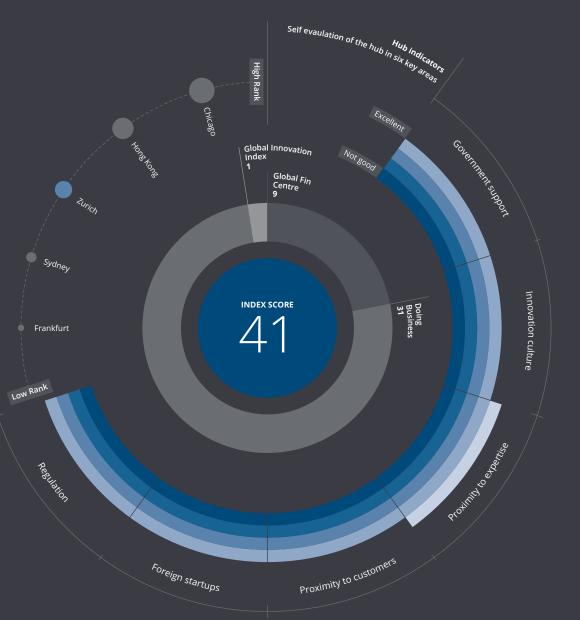
2017 will see a growing focus on Artificial Intelligence and Cyber security in Toronto. As well as this, we expect to see further regulatory developments, particularly as the regulatory sandbox develops, and more connections with other international hubs. The next Sibos conference will also be held in Toronto in October 2017

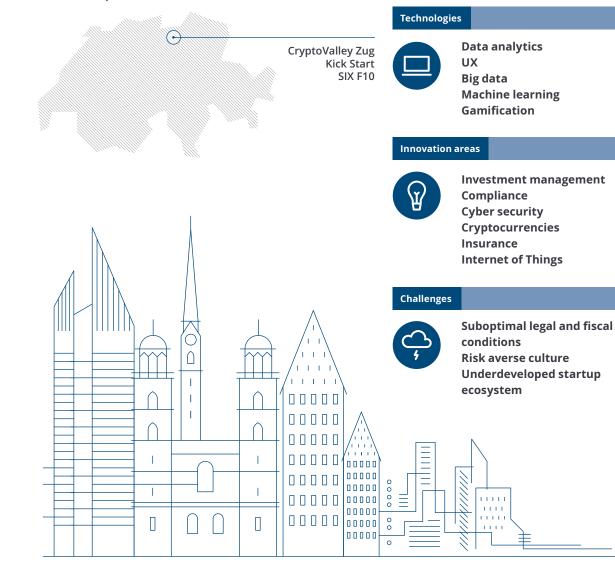


Zurich is the largest financial centre in Switzerland, a country famed for its quality, reliability, security and stability. As an innovation nation positioned in a central location geographically, Switzerland has nurtured a thriving financial services and FinTech sector, and boasts excellent infrastructure, a solid legal system and protection for consumers.

> Hub representative Swiss Finance + Technology Association

> > CEO John Hucker, CFA





Hub features

Top FinTech companies

Knip, Anivo, FinanceFox, Qumram, WealthArc, InvestGlass, Monetas, Bexio, Ethereum, Xapo, Digital Assets (Elevance), Advanon, Sentifi.

Big investors

Swisscom, LakeStar, RedAlpine, Swiss Startup Invest, Go Beyond, SICTIC, B-to-V, and Investiere. There are also private investors (e.g. large angels, family offices) which do not always disclose much detail.

Success stories

Knip, raising over \$20m and going global to disrupt insurance. Temenos, the classic story of a great entrepreneur becoming an industry leader with core banking platforms. Recently, it was a highlight to see Eric van der Kleij bring his expertise to the Kick Start Accelerator in Zurich.

The future

Sibos 2016 was a big hit. The future for Zurich will focus on strengthening the vibrant ecosystem, expanding internationalisation with visits to/from other hubs and doing more to promote the many advantages of Switzerland as a FinTech hub.

Acknowledgements

We would like to thank the Deloitte FinTech Leads below for their support on this report.

| Deloitte FinTech Lead | Office Location | Deloitte FinTech Lead | Office Location |
|-----------------------|-----------------|-----------------------|------------------------------|
| Claudio Fiorillo | Argentina | Kirsti Merethe Tranby | Norway |
| Chris Wilson | Australia | Daniel Martyniuk | Poland |
| Olivier de Groote | Belgium | Joao Carvalho | Portugal |
| Will Cornelissen | Canada | Ilya Etko | Russia |
| Jennifer Qin | China | Mohit Mehrotra | Singapore |
| Stepan Husek | Czech Republic | Thys Bruwer | South Africa |
| Alan Saul | Denmark | Rodger George | South Africa |
| Michel de la Belliere | France | Juan Pérez de Ayala | Spain |
| Hans-Juergen Walter | Germany | Victor Kotnik | Sweden |
| Dr. Paul Sin | Hong Kong | Daniel Kobler | Switzerland |
| Akos Demeter | Hungary | Thomas Wan | Taiwan |
| Monish Shah | India | Cüneyt Kırlar | Turkey |
| David Dalton | Ireland | Rajeev Lalwani | UAE |
| Meirav Hickry | Israel | Kent Mackenzie | UK |
| Paolo Gianturco | Italy | Louise Brett | UK |
| Takahisa Ohira | Japan | Michelle Collignon | USA (Chicago) |
| Patrick Laurent | Luxembourg | Joe Guastella | USA (New York City) |
| Jean-Pierre Boelen | Netherlands | Thomas Jankovich | USA (New York City) |
| Michael Millard | New Zealand | Alaina Sparks | USA (San Francisco Bay Area) |
| Joseph Olofinsola | Nigeria | | |

Studio Note: Final PDF to have embed hyperlink FinTech Leads

Thank you

Many thanks to the representatives from the global FinTech Hubs included in this report and those who have supported its development.

Sharing insights on the success stories, development areas and challenges for FinTech hubs contributes to greater knowledge sharing and engagement amongst the global FinTech community. As this community continues to grow, fostering and supporting cross-border dialogue is key to sustaining a better financial services future.

If you would like to know more about the Global FinTech Hubs Federation, the initiative seeking to connect the global FinTech community, please **click here.**

Studio Note: final PDF to have embed hyperlink on **click here**: http://thegfhf.org/

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