



Israel Fintech Landscape Report

2018



Introduction: an ecosystem of Israeli innovation

Over 350 multinational companies have set up various innovation or R&D centres in Israel

With over 7000 active start-ups, innovative disruptive entrepreneurial culture and substantial governmental support powered by incentive mechanism, it is easy to understand how Israel gained a global reputation as the “startup nation”. The tremendous variety of active enterprises makes Israel an innovation hub that offers global players a wide arsenal of solutions for the multitude of challenges they are facing and offers diverse problem-solving perspectives and digital transformation insights and inspiration.

Over 350 multinational companies have set up various innovation or R&D centres in Israel, and its VC density is one of the highest in the world – owing much to government endorsement, which in turn draws angel investors to the field.

Much has been written on the unique conditions powering the Israeli innovation ecosystem, including a highly developed entrepreneurial culture that embraces failure and encourages experimentation, an overflow of technologies and abilities from the IDF, a go-getter mentality, and an early adopting consumer market.

Naturally, these beneficial conditions apply to the FinTech ecosystem and the several hundred Israeli FinTech start-ups operating today.

Israel, therefore, is becoming a cardinal FinTech hub, in line with Silicon Valley, Singapore and London.



The Israeli FinTech market - Current Figures

Israeli startups are known for their high value-for-money ratio, derived from a combination of high technological maturity and relatively low operating costs, and therefore offer particularly tempting investment opportunities at the seed and growth rounds. Israeli startups have raised USD2.

17 billion in 168 rounds in the first half of 2017, marking a slight drop in the number of investments, but a significant 17% growth in the amounts raised, compared to the second half of 2016¹. Israeli start-ups generated over USD4.5 billion in funding in 2016, approximately more than 20% of which can be attributed to FinTech investments².

From its origins as a 90 startup, USD13 million capital sector, Israeli FinTech has grown in recent years to include approximately **500 FinTech startups**, collectively raising an estimated total of USD500-650 million to date.

Due to the limited size and centralised nature of the local finance market – comprising five banking groups controlling approximately 94% of the entire Israeli banking credit³, and institutional investors such as insurance groups, provident, pension and mutual funds – a significant portion of the financial activity in the field comes from VC funds and multinational players.

All in all, transaction value in the FinTech market amounted to USD8,911 million in 2017, and is expected to show an annual growth rate (CAGR 2017-2021) of 16.1%, resulting in a total amount of USD16,213 million by 2021. Digital payments is currently the largest market segment, with a total transaction value of USD5,997 million in 2017⁴.

1. Geektime H1/2017 report: Startups and venture capital in Israel, Geektime intelligence, 7/2017

2. Globes English - Why FinTech in Israel is booming; 23 Aug, 2016 11:51 - Jacob Copley

3. 'Banking and finance sector presents: wind of change', Miri Kimhi, FBC&Co Banking and finance, 1/2017

4. Statista.com, 2016. FinTech, Israel. Retrieved on November 13, 2017

Broadly speaking, the global FinTech market is composed of a number of key segments, according to which Israel's market can be assessed:



Digital Payments

The total transaction value in digital payments amounted to USD5,997 million in 2017, and is expected to show an annual growth rate (CAGR 2017-2021) of 10.5%, resulting in the total amount of USD8,950 million by 2021. The segment's subsets include mobile payments, P2P money transfers, and digital commerce. The latter was the largest sub segment in 2017, with a total transaction value of USD5,262 million.



Business Finance

The total transaction value in business finance amounts to USD2,466 million in 2017, and is expected to show an annual growth rate (CAGR 2017-2021) of 21.9%, resulting in the total amount of USD5,441 million by 2021. The segment's subsets include crowd-investing, crowdfunding, and crowd-lending. The latter was the largest sub segment in 2017, with a total transaction value of USD2,129 million.



Personal Finance

The total transaction value in the Personal Finance segment amounts to USD448 million in 2017, and is expected to show an annual growth rate (CAGR 2017-2021) of 42.0%, resulting in the total amount of USD1,822 million by 2021. The segment's subsets include marketplace lending and robo-advisory, the latter being the largest sub segment in 2017, with a total transaction value of USD252 million.

The FinTech Ecosystem

The Israeli FinTech industry has experienced a significant leap forward in recent years. Four years ago, Citibank and Barclays were the first global players to invest in the local FinTech industry. Today, the ecosystem is teeming with multipole global players, including JPMorgan, Chase, Visa Europe, MasterCard, Finastra (formerly D+H), Intensa sao Paulo, UBS, HSBC, and many more. Most of these players come to Israel looking for innovative solutions for existing services, competitive advantages in the digitization race, and the technologies that will shape tomorrow's strategies. The growing demand for transparent, real-time, accessible financial services and information, combined with consistently rising mobile use distribution, drive many institutions' search for new technologies and solutions that will transform complex processes into clear, user-friendly services. This need for innovation and increased efficiency is further enhanced by the impending regulatory changes in Europe, coming into effect in 2018, lessening the barrier to market entry for new players and compelling banks to share their information with third parties.

Broadly speaking, the Israeli FinTech ecosystem is characterized by an entrepreneurial mentality, high technological maturity, a small but innovation-minded local market, high international involvement and flexible regulation – five elements that shape the interactions within it and direct its challenges and advantages.

The Israeli FinTech industry has experienced a significant leap forward in recent years.

Israeli FinTech – Player-by-Player



Startups



Innovation
communities



Talent



Internationally
minded



The State



Regulation

01. Startups

Israel has over 500 FinTech startups per se, adding to that figure additional enterprise solutions, that have relatively agnostic technology that may be applied to the financial sector.

The proliferation of Israeli startup enterprises is commonly attributed to the Israeli mentality, which is highly suited to entrepreneurship – built on an immigrant society, and characterized by high ambition and agility.

While developers in Europe or the US may be reluctant to operate in an environment lacking conclusive regulatory guidelines, Israelis tend first to offer solutions and only then consider the regulator. The culture in Israel encourages experimentation and initiative, and is not afraid of failures.

02. Innovation communities

FinTech communities are another aspect of the culture of innovation in Israel, enabling developers and entrepreneurs to connect, exchange insights and to establish collaborations. Among them are the Israeli Bitcoin emBassy, promoting the use, development and regulation of bitcoin; Barclay's community space Rise Tel Aviv, who recently partnered with the 5,000 member-strong FinTech Aviv to scout for FinTech innovation in the digital age; and The Floor, a vertical-focused FinTech hub backed by Chinese investment firm The Pando Group, who want to create a complete ecosystem of stakeholders in one place and connect the Israeli FinTech industry with Asian markets.

Another facilitating platform is Deloitte's Innovation Tech Terminal (ITT), connecting Israeli innovation with Deloitte's global clients. This collaboration between Deloitte US and Deloitte Israel allows clients to leverage the innovative technologies of Israel's best and brightest startups.

The Israeli FinTech ecosystem creates and maintains myriad networking opportunities – events, accelerators, hubs, incubators, conferences and symposiums, connecting VCs, start-ups and financial institutions.

03. Talent

The Israeli FinTech industry – and High-Tech industry in general – produces a considerable amount of its talent in the army, during mandatory military service.

Advanced units (such as the famous Unit 8200, among others) develop and use advanced technologies – cyber security, IT systems, big data analytics, etc. – and allow the people serving in them to accumulate knowledge and practical experience in these fields in their early 20s. This is an especially significant advantage in the world of FinTech, that relies heavily on deep data science – a field with many military applications, such as in cyber, computer vision and NLP, among others.

Cyber innovation is especially emphasised as a result of Israel's complex security needs. Many technologies in the field were originally developed directly for the military, giving Israeli entrepreneurs a unique advantage. Military service, academic education and work

experience breeds multi-disciplinary technology experts with accumulated experience in fields that are becoming more and more relevant to FinTech – real-time analytics, algorithms, big data, risk management, antifraud and security. Israeli entrepreneurs also know how to apply online consumer-facing marketing knowledge, developed for sectors like gaming and adtech, coupled with sophisticated risk scoring algorithms to address the growing demand for P2P and SMB lending.

This multi-field education contributes, in turn, to a free flow of ideas and players between industries, and high technological maturity.

Notable Israeli FinTech Startups includes: **Colu**, a Blockchain based start-up that established local currencies, now accepted by multiple vendors and merchants in Tel Aviv; **OpenLegacy**, which developed an enterprise API integration platform for delivering core applications as Micro Services/ APIs; **Scanovate**, an identity management platform enabling an automated, personalised KYC process; **Personetics**, which enables Predictive Digital Banking; **Seegnature**, which offers a next-generation Customer Engagement Platform which digitize remote paperwork transaction; and **Lemonade**, the first fully automated insurance company.

Statistically speaking, the number of CTO co-founders in Israeli startups exceeds that of Silicon Valley's, enabling these companies to offer a technologically advanced value proposition.

Interestingly, most FinTech entrepreneurs are either experienced entrepreneurs, now on their second or third venture, or finance professionals that are well acquainted with the industry's challenges, needs and opportunities.

Israeli FinTech entrepreneurs' success abroad has allowed many of them to gain valuable insights and experience in the global markets, returning to Israel with knowledge of the global financial sector that significantly contributes to the local industry's ability to develop solutions compatible with foreign regulations and IT systems. Founders, investors and alumni from these startups are already familiar with the international sector, and can successfully interact and collaborate with global finance executives.

04. Internationally minded

Although Israeli consumers are generally open to new technologies, like purchasing from abroad and are generally intrigued by the concept of a digital wallet, they do not get to reap the fruits of their local innovation ecosystem. 90% of startups will not bother making the required regulatory and marketing adaptation to launch locally, considering the limited size of the Israeli finance sector.

FinTech entrepreneurs claim that the banks themselves make it harder for them to operate in the market, especially when it comes to competing services such as P2P loans, even though the competitive relationship between banks and FinTech startups has shifted significantly towards a more collaborative attitude.

Another hurdle on the way to a local launch is local market regulation, which is said to suit large financial institutions better, while laying an unreasonable compliance burden on small companies. Innovative state initiatives such as the sandbox, discussed earlier, aim to ease local FinTech start-ups' regulatory obligations in order to supply domestic consumers with more innovative solutions.

05. The State

Considering its substantial support for the technology sector, one cannot overlook the role of the state in the Israeli FinTech ecosystem. The state of Israel supports all avenues of technologies through hubs, the Innovation Authority (formerly the Office of the Chief Scientist), and other operations and subsidies.

Israel's FinTech potential was first identified in 2010. As part of the Treasury Ministry plan to promote the local high-tech industry ("Competitive Advantage National Plan"), the state initiated a programme intended to encourage prominent global financial bodies to establish FinTech R&D activities – at the time an underdeveloped field in Israel. A research committee, headed by the Economics Ministry chief scientist, approved a subsidy of up to NIS93 million for a period of five years, earmarked to pay 30% of a company's wage bill.

The incentive was designed to allow Israel to compete with markets such as Ireland, India, Poland or Singapore – characterised by high quality, cheap workforces – considering Israel's cost of labour is one of the highest in the world.

The program resulted in the establishment of Citi bank and Barclays pioneering innovation centres in 2011, still active today, that can be credited for a significant portion of the growth in the enterprise cybersecurity and FinTech fields.

06. Regulation

Financial institutions in Israel are subjected to a complex regulation structure – enterprise regulation (for example, licensing requirements for banks or insurance companies), or regulation applied to specific products/operations.

Regulation and FinTech have an odd relationship. On the one hand, players operating in regulated fields are burdened with regulatory requirements that limit their operational freedom. On the other hand, regulated bodies easily win the public's trust – a cardinal element in financial services. The result is ongoing tension between corporate flexibility and consumer trust and protection.

There have been claims that the lack of clear regulatory policy delays the execution of innovative FinTech projects in Israeli banks and impedes the latter from allowing FinTech companies to actively trade in their accounts. Compared to the US or the EU, Israel has a relatively supportive regulatory environment in terms of flexibility and awareness of innovation. The Bank of Israel is a significant driving force in this respect, encouraging the government to be open to innovation and to react with agility to changes in technological fields.

Several FinTech verticals, including P2P loans and advanced payments, are now currently under regulatory revision.

Investment-wise, several committees have been appointed in the past few years⁵, yielding laws and regulations enacted to create an extensive regulatory framework relating to investment in non-governmental bonds by institutional investors, tailor made credit facilities, actions as a result of debt restructuring and providing credit to entities previously subject to such proceedings.

Most notably, the regulator has recently announced its intention to establish a regulatory sandbox in collaboration with FinTech startups. The sandbox is designed ease with some of the entry barriers to the financial sector and to provide small startups with a lenient regulatory environment in which to develop innovative products.

Furthermore, the insurance commissioner recently published a digital vision, and has repeatedly stated the importance of promoting the FinTech industry, going so far as to license a new, wholly digital insurance company.

5 'Banking and finance sector presents: wind of change', Miri Kimhi, FBC&Co Banking and finance, 1/201755



Challenges

While Israeli FinTech startups share some challenges with all global startups, their unique mentality and orientation bring about wholly unique challenges when interacting with global financial institutions.

Cultural gaps

Israeli FinTech companies are considered especially agile, aggressive, open and direct, making communication with executives in global financial institutions particularly challenging. They have to dial back on the technology, telling instead a compelling story about the way their technology may directly benefit the institution in question. Calm, patient storytelling is the key to successful collaborations with financial institutions abroad.

Unfamiliarity with target market needs and regulations

As the global FinTech market grows ever more crowded and its technologies gain popular appeal, Israeli startups have to develop truly unique value propositions in order to compete with local FinTech companies. Local FinTech startup solutions may not necessarily be at the cutting edge of technology, but they are built with the characteristics, requirements and regulations of the local market in mind.

More tech, less business

In terms of technological maturity, Israeli startups have a significant advantage. The business side of entrepreneurship, however, often lags far behind. Israel's small market and lack of widespread MBA culture means Israeli startups are tech oriented, sometimes to a fault. Working with an international financial institution requires

expertise – not simply relying on executives to realise the possible applications for the technology, but tailoring a presentation to their needs.

Long cycles

Pushing technology deals through a bank's mechanisms is a long process, a transaction cycle that could take 18-24 months, if not more. Most FinTech companies won't last that long. With Israeli startups this seems to be more of a challenge, since Israelis generally look for quick wins and are under extreme pressure from the competitive domestic ecosystem, compared to the pressure experienced by startups worldwide. The cycle could be shortened by turning to professional mediators who will connect the startup with relevant decision makers in the organisation and can also help provide focus to the pitch.

Technological maturity in financial organisations

The spread of FinTech solutions and growing technological awareness in banks have, in a way, turned the tables in the dynamics between banks and FinTech startups. With more in-house capabilities, unique business needs, and multiple complex IT system requirements, banks will sometimes prefer to develop their own solutions. In some cases, FinTech startups that sold their solution to a bank have been informed, sometime after the sale, that they were dismissed since the bank opted to develop a solution

in-house once it had an adequate grasp of the solution and the underlying technology.

Bank-side competition is likely to become more substantial and intense in the coming years, and requires FinTech startups to develop a stronger value proposition or change their collaboration models.

Local financial institutions

The prevalent perception regarding banks and innovation views banks as cumbersome, traditional institutions that fear FinTech. This perception no longer applies. Understanding their greater cumulative value, banks strive to establish a cooperative relationship with startups in order to enhance their own abilities and to compete better against technology titans such as Amazon and Facebook.

Banks in Israel interact with FinTech companies in three main areas: embedded FinTech solutions in the bank's IT systems; bank-adjacent interaction – banking services automatically utilised by FinTech operations; and banking services – financial services (such as money transfers and cash management) that FinTech companies require in order for their business model to function.

The financial sector in Israel is relatively small (in accordance with the country's population), but very open to innovation, providing a substantial advantage to the Israeli FinTech ecosystem by acting as a beta site for Israeli FinTech, cyber

security and mobile applications.

The banks in Israel are universal, closely simulating the operation of big international banks, but on a smaller scale. Many Israeli FinTech companies use local banks to learn more about their products and fine tune them as they go from theory to practice, offering global players more mature, tried and tested solutions.

The banks themselves find it easier to co-operate with Israeli FinTech companies, enabling them easily to keep up with new trends and development and integrate FinTech solutions in their strategic planning.

Innovation in Israeli banks

While all Israeli banks invest heavily in innovation, each has its own technological strategy and emphases, depending on its individual business strategies.

For example, one bank whose strategy centred on investment solutions has just implemented a robo-advisory solution developed by a local FinTech company.

Most banks are using FinTech solutions as part of their wider digital offering. A good example of this is Pepper, established this year by one of the biggest banks in Israel – a mobile-only digital banking platform, supported by an Israeli FinTech solution. Another large bank recently announced the upcoming implementation of an innovative Bot solution, developed using two different FinTech solutions, while the largest bank in Israel also announced

a co-operation to build a Blockchain platform for the management of bank guarantees.

Even Israeli insurance companies, operating in a particularly conservative industry, are becoming increasingly interested in innovative InsurTech technologies, and are cautiously experimenting with underwriting personalisation and new distribution channels.

Investors

The Israeli FinTech industry is sponsored by a variety of local and international entities, including venture capital funds, global financial institutions and government incentive programs.

Following government-led structural reform in the financial sector and new legislation (most notably the 2012 amendment of the Encouragement of Capital Investment Law) the volume of credit provided by institutional investors has been constantly increasing over the last decade. The growing impact and larger market share of institutional investors led to a strengthened regulatory framework applicable to those entities.

Israel is considered the most VC funded country in the world, with more investment funds per capita than in any other country. Israeli start-ups are regularly noticed by many foreign investors, and companies such as eToro, Payoneer, Lemonade and OurCrowd have recently received substantial funds from investors in the US, Europe and

China.

China, in particular, is increasingly interested in the Israeli ecosystem, investing over USD1 billion in it in 2016 alone.

Because FinTech solutions rely so heavily on other technologies, namely cyber-security, IoT, AI technologies, and mobile applications, it is challenging to clearly distinguish between FinTech investments and investments in the general Israeli innovation ecosystem. At an estimate, Israeli start-ups recruited between USD400-650 million in 2016⁶ and USD143 million in 11 rounds in the first half of 2017.

Value for money

As a general rule, the Israeli ecosystem provides great value for money for investors because of its high technological maturity and low operating costs.

Compared to the Silicon Valley ecosystem, it appears most Israeli startups have relatively less funds. Israeli start-ups' seed rounds stand out from those of startups elsewhere, asking lower funds for more advanced products, making them more attractive for VC funds who want to distribute risks widely in their innovation portfolio.

International Players

Multipole international technology, industry and finance firms choose Israel as the site of their innovation centres. Intel, IBM and SAIC, among

6 Geektime H1/2017 report: Startups and venture capital in Israel, Geektime intelligence, 7/2017

others, are using Israeli talent and technologies to further their interests and to optimise existing work processes.

Over the past five years, more and more global financial bodies chose to scout Israel for tech solutions and to establish hubs and accelerators for local talent. The latter option became a common way to bridge the distance and lack of operational branches in Israel by providing a platform for them to meet local startups, watch them grow, review their proposed solutions and consider their integration into the bank's systems.

Citibank was one of the first international players to enter the local FinTech ecosystem, opening its first global accelerator in Israel, in 2013. A total of 68 startups have gone through it since then, in mentorship rounds lasting four months. The interest garnered by Citi's accelerator boosted the FinTech ecosystem and inspired other global bodies to do the same, with new accelerators and innovation hubs by JPMorgan, Barclays, Visa Europe and many others. Even players that have yet to establish a physical presence in the ecosystem are connected to it through enabling platforms such as The Floor, as well as Deloitte's ITT, whose FinTech practice is dedicated to curating innovation and facilitating relationships with the Israeli startup Ecosystem by providing clients with Immersion Labs and Scouting Services into Israeli technology innovation.

The Implementation Challenge

Despite the proven fertility of Israeli hubs, a substantial part of their developed solutions fall through at the implementation stage. Global banks use a wide variety of IT systems, and their IT managers are often reluctant to implement new solutions that have yet to be properly and widely tested in actual market environments. Even FinTech solutions that were beta tested in Israeli banks don't always meet the IT requirements of global banks, considering their greater volume of operations, various regulatory requirements and multiple IT systems.

Global players tend to apply one of two approaches when facing the implementation challenge – they can either allocate resources to integrate the solution by forming dedicated implementation teams within the organisation's IT department, or they can use accelerators to identify talents rather than solutions, discarding the startup's developed solution and hiring its people to develop innovative FinTech solutions from within the organisation's IT department.

Impartial Innovation

As financial institutions mature technologically and gain autonomous development capabilities, developers themselves are starting to voice their concerns in regard to the future and independence of disruptive technologies.

Are international players buying innovative solutions in order to implement them, or just to take them out of the market? Not all technological disruptions can be easily leveraged to the banks' advantage. Some – cryptocurrencies or P2P loans, for example – can directly compete with the banks and severely encroach on some of their operations.

Most developers, though, choose to attribute significantly less malice to the banks intentions, worrying, instead, that developing FinTech solutions from within the banks will diffuse some of these technologies' potential revolutionary aspects. For instance, banks may develop a less transparent version of Blockchain that will better fit their needs, but which won't further the Blockchain community as a whole.





Trends

The local FinTech industry touches on virtually every pillar of technology currently in the sector: payments, insurance, capital raising, investment management, training and investing, digital, analytics and many others. The intense activity in the global FinTech market have brought some of its prominent verticals to the verge of saturation, yet many others still remain largely uncharted and untapped.

InsurTech

There are over 100 InsurTech start-ups operating in Israel, and a growing segment of tech for insurance companies, developing technology that, while not directly targeting insurance companies, may be relevant to global players in the sector. Here too, the Israeli Government and international bodies provide support for this budding industry, with startup competitions and hackathons. Lemonade and Next Insurance are two dominant ventures in the field, both of them raising substantial funds in their last investment rounds.

The insurance industry is ripe for disruption, since its operational and business models, data collection and policies have remained unchanged for centuries while the world around it undergoes rapid transformation.

With changing consumer expectations, smartphone commodification and developments in data science and IoT, the industry understands it can and should adapt to the times and become more efficient, personalized and accessible.

InsurTech startups offer a variety of solutions – advanced data collection that enables personalized and/ or differential policies that update in real time, digital distribution channels that eliminate the need for human mediators, chat bots that allow customers to file suits or report accidents automatically, solutions that will allow legacy systems to interface with each other and mobile application, etc.

Consider, for example, the auto-insurance world, an industry with an annual worth of USD200 billion in the US alone. The insurance worlds are directly influenced by such technological developments as autonomous vehicles, or such trends as car sharing, which compel them to develop new models for multiple driver insurance, insurance to the autonomous vehicle industry, sensor-based differential insurance that adjusts policy rates according to the driver's behaviour, and adaptations to the regulatory regimes that will accompany all of the above.

Beyond issues such as dynamic underwriting, distribution channels and risk mitigation, InsurTech technologies can offer insurance

The insurance industry is ripe for disruption, since its operational and business models, data collection and policies have remained unchanged for centuries while the world around it undergoes rapid transformation.

companies innovative ways to avoid fraud. Blockchain's distributed ledger can aggregate all of the reports and data concerning a specific claim, making it very easy to identify fraud attempts or multiple claims for a single event.

Many InsurTech entrepreneurs are insurance veterans who previously held senior positions in insurance companies or in the Ministry of Finance. Some of them identify the opportunities to greatly improve operations in the insurance industry and leave their lucrative positions behind to start their own enterprise. They know the industry, know its processes and bottlenecks, know how to streamline it significantly, and now finally have the technology to make it happen. It is worth noting, though, that some of the world's leading FinTech startups (including Lemonade) were founded by entrepreneurs with no previous connections to the insurance industry, making it easier for them to disrupt the industry from the outside, free from preconceived paradigms or norms.

As InsurTech evolves, it will have to address the issues surrounding consumer privacy – a particularly relevant question in the data heavy insurance world, where consumers frequently relinquish personal data for better policies and rates.

In the current state of affairs, the Israeli InsurTech industry is rapidly growing, yet it still lacks the necessary business platforms for beta testing. The openness to innovation of the banking sector that contributed to the FinTech industry's ability to thrive and maintain a competitive advantage in the global market, is yet to be shared by insurance companies, prompting Israeli entrepreneurs, such as Lemonade, to skip the local market and base their operations elsewhere.

Blockchain

There are currently 100 Israeli startups working exclusively on Blockchain solutions, and many others who bootstrap or simply operate under the radar.

Blockchain was introduced in 2009, with the Bitcoin protocol issuance. Since 2016 there has been a tremendous growth in the number of Blockchain (or Distributed Ledger Technology) applications. The technology's features and advantages - namely the production of verified, unchangeable information - are particularly suited to application in the financial sector. 80% of banks today experiment with Blockchain technology, and that percentage is expected to keep rising.

Blockchain can have relevant applications in virtually every field of operations in the financial sector: InsurTech's dynamic underwriting and claim processing, distribution of risk, cross border payment, remittance optimisation, investment management, syndicate loans, crowd-funding, anti-laundering processes, and many other resource-exhausting processes that each institution must manage individually.

Consider the world of KYC (Know Your Customer), a procedural formality in which financial institutions invest a large amount of time and resources, and which can be significantly improved using Blockchain. At present, a client who wishes to acquire any kind of service from an institution (taking out a mortgage, loans, on boarding, etc), has to undergo a separate KYC process for each individual service, even if they are provided by the same institution. Beyond the inherent inefficiency of such a process, repeatedly entering data into the system increases the likelihood of human error and fraud. Transferring the procedure to one distributed ledger will enable a significant conservation of time and resources, and may even open up new revenue streams if, say, the said institution chooses to monetize the completed KYC process, and to share it with another bank, or updates all institutions in a given network in real time regarding changes in a client's financial status.

Another relevant field is ICO (Initial Coin Offering), a recently developed investment vehicle that has recently gained tremendous traction. Israel is an especially potent cryptocurrency hub thanks to the related military technological development and academic research, with dozens of ICO startups that have so far raised a total of more USD250 million.

Deloitte Israel supports ICO processes on the accounting, taxation, storytelling, white paper and business model aspects.

The Israeli regulator is well aware of these developments and wishes to allow the continued growth of Israeli Blockchain, including by recently appointing the Hauser committee to determine the status and appropriate regulation of Cryptocurrencies.

AI

Currently there are around 300 active AI start-ups currently operating in the fields of AI, machine learning, deep learning, robotics, computer vision, etc., with 50 other companies that have already exited, reaching a total of USD1 billion in returns⁷.

The myriad applications of AI technologies apply to a very wide range of industries, of course, yet they are becoming especially relevant in the data-rich world of finance. It all comes down to data – channelling it, leveraging it, analysing it, and producing insights for both the organisation and the consumer. More and more financial institutions are embedding AI technologies in their inner work processes and the services they offer their clients. In customer engagement, for instance, many processes can be “outsourced” to bots.

AI is a robust field in the Israeli ecosystem, especially in relation to innovation in predictive analytics – that is, the ability to identify patterns in large bodies of data in order to establish behavioural trends and predict outcomes. This means, for instance, that a bank could target its clients with the most appropriate services or products at the most appropriate time.

The capabilities created by AI technologies are highly applicable to investment management, since they allow for the drawing of information from various sources, for it to be analysed, and then to offer constructive values to every individual client. AI capabilities could also be used in private banking and digital banking, offering clients of such institutions advanced insights, such as how money could be saved every month without substantially altering a client’s lifestyle.

The future of FinTech – A window of opportunity

The first half of 2017 saw a decline in the number of FinTech investments in Israel, part of a global decline in investor interest. As always, what started in Silicon Valley a year ago, now reaches Israel, although in a less adversarial manner.

This is likely the result of the commodification of FinTech technology and increasing market density – too many companies are offering the same services or operating in the same niche, inevitably resulting in a saturated market.

While the potential in certain fields – namely robo-advisory, identity management, InsurTech and Blockchain – is far from exhausted, many others, including payments, loans and P2P, have become commonplace technologies. Banks are becoming less dependent on startups and are starting to develop their own tailored solutions. This process will gain momentum as more talent joins banks' in-house development departments, and as old legacy systems are replaced by slick, new ones, significantly cutting the demand for externally developed patches to bridge the gap in banks' technological abilities.

Israeli FinTech startups now face a significant window of opportunity to sell their products, before the banks co-opt the field. The global FinTech market is at its prime, and in order to compete effectively with banks and local FinTech companies in the global market, Israeli firms must develop unique and extremely innovative value propositions. If past experience tells us anything, the Start-up Nation's go-getters are more than up to the challenge.

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