Geektime

Annual Report 2017

Startups and Venture Capital in Israel

Altshuler Shaham Benefits — Change • Innovate • Succeed

Deloitte.

LeumiTech

Cisco Investments

Credits

This report was written by:

Beni Hakak
Manager
Business Intelligence Unit
Geektime

Rinat Korbet
Senior Analyst
Business Intelligence Unit
Geektime

Geektime
Business Intelligence Unit

Geektime
Business Intelligence Unit

Edited by
Laura Rosbrow-Telem

Designed by
Hadas Shezaf, Geektime Design

Tel Aviv
January 2018

COPYRIGHT & DISCLAIMER

Methodology

Our report deals with Israeli startups only, including companies that are either located or registered in Israel, as well as companies that were founded in Israel and maintain their presence in the country.

Our report aims to reflect the reality of the Israeli market. Therefore the numbers shown in the report refer solely to primary deals. Second and third time exits and secondary IPOs, which distort the situation, aren't included in this report.

Our data is a combination of information given to us directly by investors and startups, publicly available information and other inside media sources.

The proportion of investors and startups who responded positively to our request for information was extremely high. Still, not all investors are always eager to share information about their investments. In order to respect the investors' wishes, we are not disclosing specific details about investments that were not released to the general public; instead, we are showing aggregated data. At the same time, there may be some information gaps due to details that were not disclosed to the public, or which were not shared with us.

Table of contents

About Geektime

Geektime is one of the largest international tech blog located outside the U.S., focusing on global innovation and highlighting startups from across the world. Geektime uncovers news from around the globe in English (Geektime.com), Vietnamese (Geektime.vn) and Hebrew (Geektime.co.il).

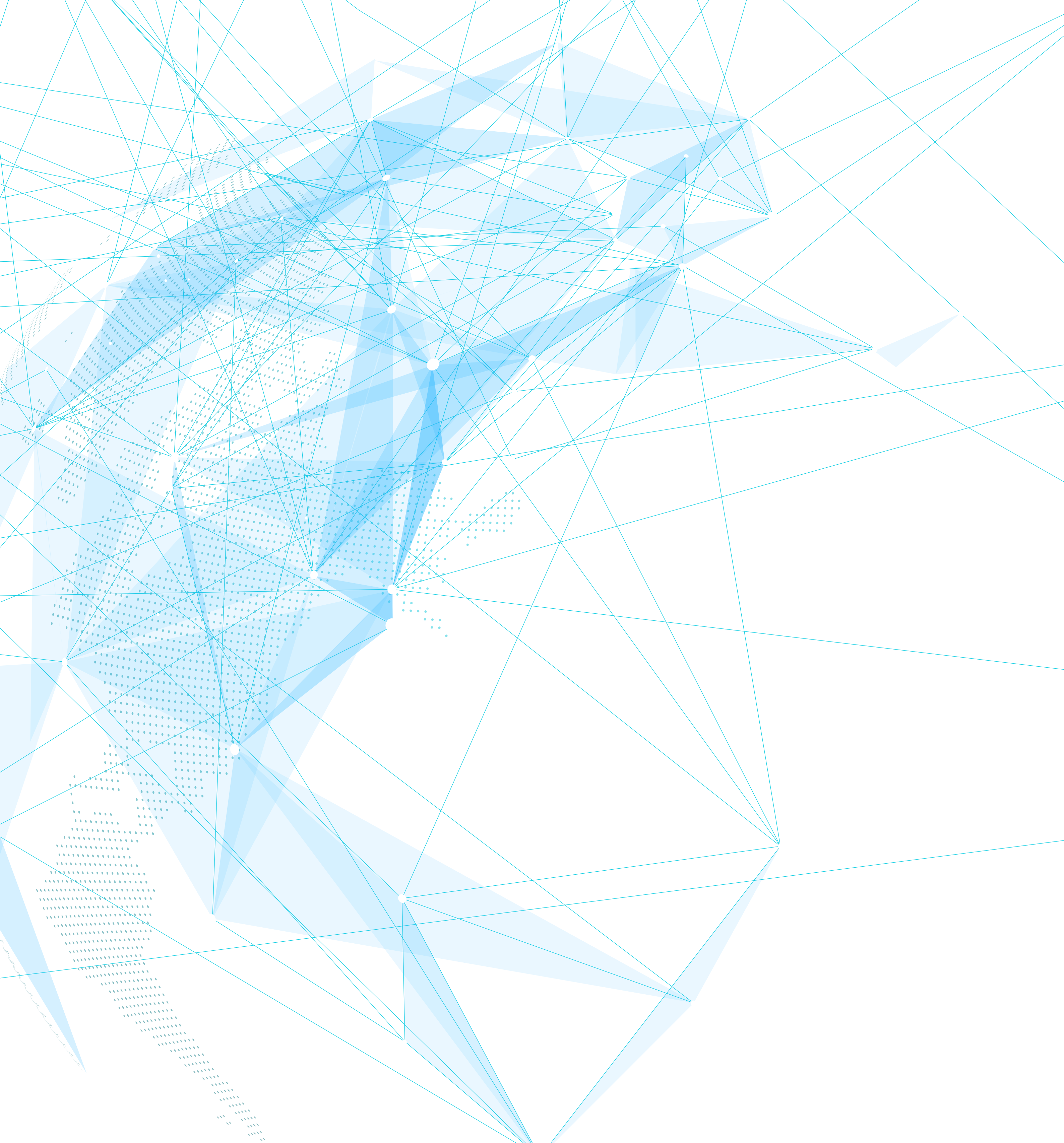
In addition to our in-house content, Geektime has a large startup contributor network of 2,000 opinion leaders from around the world. Our sites are a crucial means of exposure for non-U.S.-based startups, which comprise some 80% of the global startup market. We are their primary voice to investors, entrepreneurs, fellow geeks and tech enthusiasts, helping them cut through regional boundaries and compete in the global marketplace.

Since March 2009, Geektime has engaged the startup and technology world by providing them with their daily fix of news, updates and articles on various topics in technology; quickly becoming a withdrawal-inducing morning, afternoon and evening vice for its readers; even trumping coffee in many independent studies as the first thing tech inclined individuals must have before starting off their workday. Geektime boasts a reader base of more than 2,000,000 unique visitors a month around the world. These are die-hard tech lovers who know their startups, devices and new technologies — and Geektime is their trusted source for everything tech.

Beyond covering the technology sphere, Geektime, based in Tel Aviv, Israel, also produces and hosts many of Israel's leading tech events, providing front and center media coverage of the latest and greatest coming out of the Israeli startup, IT and entrepreneurship scenes. Geektime also has offices in NY, Vietnam and is constantly expanding to new startup ecosystems.

Geektime
Business Intelligence unit

Our business Intelligence department is a unique team that focuses on data intelligence and analytics, with deep understanding and familiarity of both high-tech and startup industries worldwide. Our team of experts is a combination of engineers, economists, analysts and lawyers.



Introduction

2017 was a surprising and interesting year in the startup and venture capital world both in Israel and globally. It started with quite a few concerns regarding geopolitics and the possibility that it would have a negative impact on investments and the tech industry. Fortunately, technological innovation once again proved that it has its own rules and the ability to reach beyond boundaries.

In terms of capital raised by Israeli startups in 2017, there was a 13% increase in the total amount raised. Most of the funding was directed to three main sectors: **cyber security**, which returned to light this year; **autonomous vehicles**, a sector in which Israel is a global leader; and **artificial intelligence**, a field in which Israeli academics and entrepreneurs are leading breakthroughs.

The majority of the increase in fundraising was attributed to growth rounds. At the same time, however, there was a sharp decline in the sums raised for early stage startups. We hoped this problem, which started to emerge in 2016, would stay in the past due to its harmful effect on the Israeli ecosystem. A fear of early stage investing causes startups to shut down because they run out of money and can't manage to raise more. It can also dissuade entrepreneurs from launching new startups because market conditions are not optimal.

M&As in 2017 were very impressive. We had the $15B acquisition of Mobileye by Intel and SimpliVity's $650M acquisition by HPE and Plarium's acquisition for $500M by Aristocrat Leisure, just to name a few.

The Israeli ecosystem closed the year with M&As totaling more than $7.3B (excluding Mobileye), a more than 50% jump over 2016.

We cannot discuss 2017 without referring to one sector that made lots of headlines and began piquing the interest of the general public: blockchain, or the better-known Bitcoin. Some see it as a bubble while others see it as a justified "gold rush" of a field that is not entirely understood at the moment. What is certain is that the technology on which it is based is here to stay and we are currently witnessing only some of the many opportunities this technology can offer.

ICOs (initial coin offerings) have taken the place of VC investments for blockchain startups (though, this wasn't high to begin with). During 2017, there were 17 Israeli ICOs that raised over $490M. More interestingly, a mass audience beyond venture capitalists has flocked to invest in ICOs, often looking for a good deal in purchasing one or another token in a pre-ICO.

We have yet to see the full potential of blockchain. Currently, it is partly complicated by regulatory ambiguity and uncertainty. We hope a path will clear that will enable VC investors and "regular Joes" to have a bigger role in this domain in a transparent and safe manner. Since everyone can invest in this field, without needing to be an accredited investor, it is likely to keep growing in size and impact as more people feel comfortable investing in it.

We look forward to seeing what innovations await us next year!

Geektime
Business Intelligence unit

A word from the industry

"
So much has happened this year, and we're taking a quick look back to summarize what we've noticed as trends in these last 12 months in Israel.

First of all, we've seen the continued development of the cloud ecosystem, with an emergence of new approaches and services. This has occurred as a result of cloud, and more broadly, IT becoming more dispersed. Because of this environments are becoming harder to manage and more decentralized. New use-cases continue to add more complexities to the Enterprise environment, and it's created a need to think about hybrid scenarios and of new workloads such as Serverless and Microservices. We've seen a wave of companies tackling this hybrid world. Many of them, with a Cloud-Native approach. In many cases, startups are trying to help solve the complexities by being AI-born and apply Deep-Learning to manage the environments, operate them, or secure them.

This has also been the year of the emergence of edge, with a proliferation of nodes, endpoints, and environments becoming more multi-vendor ones. This has created opportunities for new technologies to cater to those scenarios. Moreover, the complexity of these massive environments is tackled with an arsenal of more flexible and configurable solutions across the entire stack, from configurable silicon, more flexible management software, and the notion of software-defined trickling down all the way to the hardware.

Additionally, we've seen an uptick in the funding of IoT, AR/VR, and Autonomous cars, as well as a steady inflow of companies in Big-data, Security, and DevOps. This diversity of technology segments, which correlates well with Cisco Investments priority areas, makes Israel a fertile ground for strategic innovation investments. "

Daniel Karp

Director,
Cisco Investments and corporate Development

Cisco Investments

"

The most notable sector for 2017 was automotive, which has picked up and become the busiest sector in Israel including the mega exits of Mobileye, which was acquired by Intel and Continental acquiring Argus. Notable strategic investments include Mercedes investing in VIA, Delphi investing in Otonomo and Valence and Toyota investing in Autotalks.

It look as though 2018 looks is going to be a very interesting year for the Israeli tech market. Entrance of additional multinationals may continue to be the burning issue with regards to the high tech workforce, as competition for skilled workforce is growing.

In parallel, the geopolitical changes, specifically the new tax reforms of the Trump administration, as it may have an effect on multinationals' location based decisions (wether to operate in Israel or the US) as well as their appetite to continue to acquire Israeli tech companies."

Yifat Oron

CEO
LeumiTech

LEUMITECH

A word from the industry

"
2017 in Israel was a year of massive high-tech exits, large investment rounds, and new global players stepping into the ring. Most of Israel's 2017 exits came from familiar domains – mobility, healthcare/life sciences, and cyber – but that doesn't mean that Israel's startup economy is narrowing its scope. In fact, we predict that some of Israel's breakout domains in 2018 will be ones that are currently nascent, specifically Augmented Reality, RetailTech, and the Future of Work.

Augmented Reality (AR) - We predict that in 2018, startups will find unique ways to leverage AR technology for consumers and professionals as exposure to the technology continues to grow. In particular, we see a focus on applications for consumer experience industries such as retail and culture, as well as in heavier industries, such as manufacturing and utilities.
RetailTech - We predict RetailTech will gain a place in the spotlight in 2018, with a focus on improving the customer experience in two ways. First, we see a continued move toward e-commerce. Second, we predict the continued incorporation of high-tech into the in-person shopping experience through the addition of sensors, GPS, smart cameras, remote monitoring, smart shelves and carts, computer vision and AI.
Future of Work – The Future of Work is being shaped by two powerful forces: The growing adoption of AI in the workplace and the expansion of the workforce to include both on- and off- balance sheet talent. These new ways of working are still in the growth stage, but their potential to affect the way we all do business is huge.

Deloitte's Innovation Tech Terminal (ITT) is a collaboration between Deloitte's US and Israel practices, connecting global clients with disruptive Israeli technologies. ITT provides unique added-value and market- oriented services to Israeli startups throughout their entire entrepreneurial lifecycle. "

Amit Harel

Director, Innovation Tech Terminal (ITT) Leader
Deloitte Israel

Deloitte.

"
It is difficult to point out explicit trends in our industry, but we have witnessed an impressive growth during 2017 in the sums of exits, in comparison to the steady decline in past years.
This positive trend is associated with two extraordinary transactions of over $1B each and with the blessed initiative of Israeli companies taking part in the local acquisition scene.
In spite of the increase in number and sums of late-stage investments, we should be attentive to stagnation in early-stage funding that can impair the ability of young companies to realize their potential.

Furthermore, it is important to take into consideration the large-scale tax reforms recently implemented by Trump aiming to redirect capital into the US, which might affect future growth and behavior of investors and entrepreneurs in 2018."

Ronen Solomon
Chairman Of The Board,
Altshuler Shacham Benefits

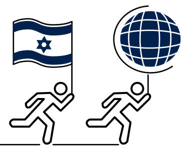
Executive Summary

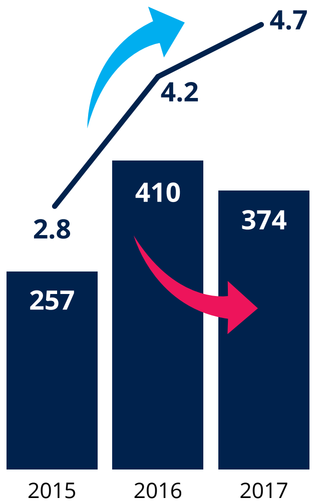
Investment Activity in 2017...

1 The sum of investments has risen

2 Fewer startups managed to raise money

3 Israel has caught up with global trends

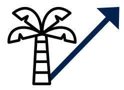




Israeli investments

Sum [$BB] ■ Number [Units]

4 Growth stage explosion



Growth

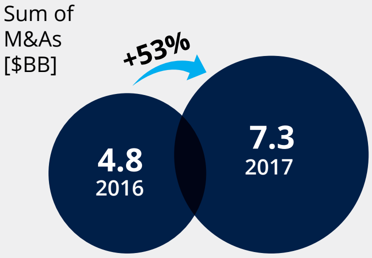
We saw an impressive increase in the sum raised by Israeli growth stage startups during 2017.

5 Early stage slump

Early stage

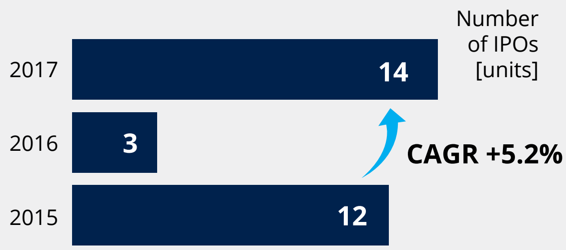
There was a stagnation in the number of early stage rounds and a decrease in the sum they managed to raise.

M&As



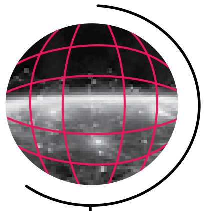
Record-breaking deals in 2017 included SimpliVity, Plarium and Argus Cyber Security, all of which were acquired for $450M+ sums. Mobileye was acquired by Intel for a staggering $15.3B, but is excluded from our ranking since it already IPOd in 2014.

IPOs



This is the most fruitful year for IPOs in terms of the number of IPOs in the past three years. The 3 IPOs that stood out in terms of sums of money raised and valuations were Aeronautics, ForeScout and UroGen Pharma.

BLOCKCHAIN



A GLOBAL CHANGE

After a year chock full of explosive headlines on blockchain, bitcoin, token sales and initial coin offerings (ICOs), the public finally woke up to the promise of blockchain technology in 2017. Some compare the blockchain rise to the internet revolution. **Over the past year, we have seen the meteoric rise of Bitcoin, which jumped from $1,000 to $20,000 at the beginning of December.** The rise was mainly due to the introduction of new players into the market. Today, in most countries, appropriate legislation has not yet been formulated for ICOs, since this is not a security (in most cases) and the method of capital raising closest to it is crowdfunding. The sums raised by ICOs in 2017 exceeded the $4B threshold. This flow of money led non-blockchain startups to take their chances in raising capital through ICOs even when their domain was completely irrelevant to blockchain.

ISRAEL

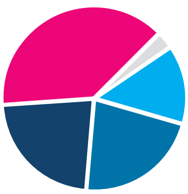
WHY IS ISRAEL A GREAT PLACE FOR THE BLOCKCHAIN INDUSTRY?

Israel is an international innovation center in all aspects of blockchain technologies and cryptocurrencies. It has a considerable amount of cryptography experts, cyber security and fintech giants as well as successful startups, and enjoys a vibrant community of cryptocurrency enthusiasts. **Despite the relatively small number of Israeli blockchain startups, they have shown impressive achievements in terms of capital raising, ICOs and media attention.**

88
Startups

39% Financial services

3% Hardware & mining



22% Enterprise & cloud

21% Social & media

13% Technological infrasructure & protocols

$490M
Raised in ICOs

Top Israeli ICOs:

SIRIN LABS
Bancor
STOX
ZEN

$46M
Raised in VC financing

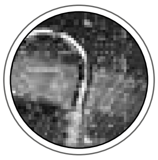
Top VC-backed:

colu.
STOX
simplex

Executive Summary

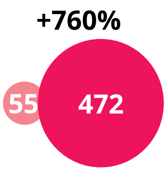
Leading sectors

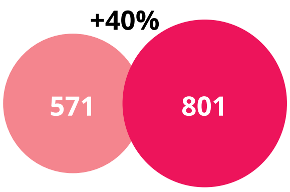
Artificial intelligence
In the last two years, the AI field has made a huge technological leap forward and created a huge media hype, causing investors to hesitate to invest in any startup that does not have an AI strategy.

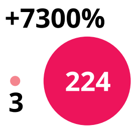


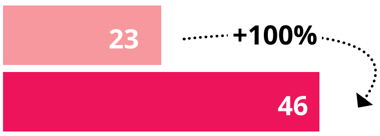
Cyber security
The increasing use of smart IoT devices, the transition to cloud environments and the increasing network connectivity in every domain makes cyber threats more serious, frequent and dangerous to businesses, organizations, devices and individuals.

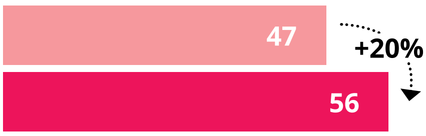
Pharmaceuticals
Many pharmaceutical companies tend to be slow in the creation and adoption of technological changes. Therefore, quite a lot of R&D budgets have been allocated to external sources of innovation - startups.

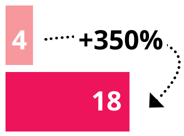












Predictions

1.
Improved artificial intelligence

During 2017, artificial Intelligence, machine learning and deep learning continued to become more significant and essential parts of the startup world. Just this year, more than 280 new Israeli startups that utilize AI technologies entered the market. We expect that many more creative AI solutions and innovative ways to solve complex business problems will come to light in 2018.

2.
Sophisticated IoT solutions

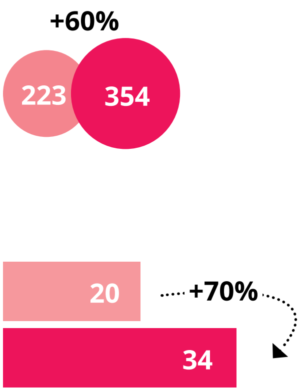
The Internet of Things (IoT) has been growing for several years. And it seems that in order to produce smarter solutions, society and developers need to start creating products with IoT connectivity and application in mind. Efficiency, convenience and integration in everyday lives will be the key for adoption.

Israeli investments by sectors graphs

Number [Units]: 2016, 2017
Sum [$MM]: 2016, 2017

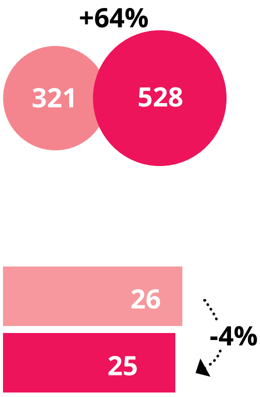
Medical devices

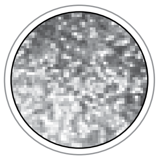
Today's medical devices field is booming with innovation aimed to assist with various medical processes such as diagnosis, monitoring, injury prevention, rehabilitation and treatment. There is a growing need for advanced and non-invasive diagnostic tools.



Transportation

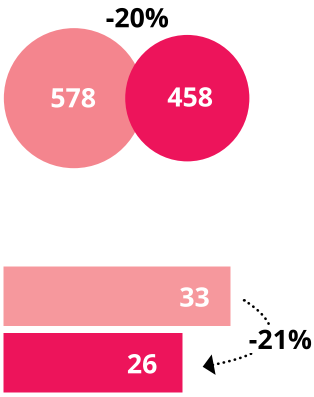
Investment in the transportation sector has risen to new heights as the dream of autonomous cars seems closer than ever. Over $1B has been invested in startups that are leading the world toward a vision in which vehicles will be connected, shared and autonomous.





Fintech

The technological revolution is making its way towards the financial industry loans, investment management, payments and money transfers, P2P loans, insurtech, blockchain and cryptocurrencies are the main areas in which fintech startups are engaged.



3.
Autonomous, connected, shared cars

What a decade ago was only a dream that started to take shape, might become a reality this year. First, Google is planning to launch a fleet of taxis based on the autonomous car they created called Waymo in a suburb in Phoenix, Arizona, USA. This is one step towards legislating other laws in other states in the U.S. – all around using autonomous cars.In addition, with companies like Ford that joins and develops sensors and hardware related to autonomous cars, we might get a chance to see more and more autonomous cars being used. In the beginning, they will probably be used as a shared service (such as taxis) in different areas in the U.S., and in the future, they will expand to other areas.

4.
A blockchain-dominated world

In the future, each non-blockchain companies will be threatened by a blockchain-based competitor. New players, including financial and institutional organizations, will join the crypto world. The market is expected to reach a staggering $3T. 2018 will be marked by cryptocurrency forks following the recent success of Bitcoin Gold. The desire for easy bucks will attract forks and ICOs of all kinds. In both cases, we expect a lot of other crypto derivatives in our wallets over the coming year.

Global market overview

2017

While there was a significant increase in startup investment sums

There was a decline in early stage investments

At the end of 2016, many venture capitalists were cautious about new investments, worried about the results of the U.S. election, Brexit, the stagnation of the Chinese economy and other geopolitical events. But thankfully, this fear soon evaporated and VC funding in H1 2017 returned to the highs of the first half of 2016. While H2 2017 was less successful than H1, it continued to recover from the low of H2 2016.

The trend of "mega-rounds" continued to be dominant throughout 2017. Because of the stability in the global economy, investors with deeper pockets - like VCs - were more willing to take certain risks, such as investing huge sums of money in growth stage startups. However, there was a decline in the number of investments and sums spent in Seed, Pre-Seed and Series A stages. In other words, there was a decrease in early stage investing. This drop demonstrates that VC investors are currently less inclined to invest in a large number of younger startups, which was more the case in the past.

Instead, investors prefer to put their trust in fewer, more mature startups: ones that have proven to be successful and have shown rapid and aggressive growth. It could indicate that investors have less fear of missing opportunities and are wearier of startup failures than in previous years. Interestingly, early stage funds have grown in size and are investing more in follow-on investments.

But the long-term significance of a cautious investment environment towards early stage startups is a serious blow to the high-tech market. Without investing in Seed rounds, there won't be giant tech companies like Uber, let alone enough money to support new and promising entrepreneurs. In the long run, fewer successful startups that make exits mean there will be fewer entrepreneurs with money to invest in startups or launch startups. Although the U.S. remained a leader in the VC investment domain in 2017, Europe and Asia showed an increase in the sums of money invested in startups, though the number of deals hasn't risen. Chinese companies invested a lot and conducted many M&As in 2016. But its government started imposing restrictions on several Chinese investors who had made the largest deals abroad, fearing that capital outflow and high debt levels were endangering the economy. However, toward the end of 2017, the Chinese government issued formal regulations clarifying the types of transactions that Chinese companies can carry out, restricting overseas investments in some industries but encouraging ones in technology sectors. This means that we will see a definite boost from China in terms of M&As and investments in 2018.

There was a moderate increase in the sums of money spent on M&As but also a slow and steady decline in their number. Successful startups growing at a fast pace may prefer to raise a mega-round instead of selling to another company and losing their independence. VC funds are also growing to levels not seen since the dot-com bubble and can provide investments that allow companies to stay as private companies longer.

There are other economic factors behind the dip in M&A deals. The uncertainty surrounding the Trump government's tax and antitrust policy could have impacted deal flow. Before, startups could only raise such large sums by going public. But corporates are willing to spend more money on M&As due to the needs of the market. It is still a good way for corporates to get into new areas faster and even reduce taxes if they move into countries outside of the U.S. to sit in the same place with the acquired company. To compete in a technology world dominated by tech giants, corporations need every advantage they can get. From the startup's point of view, joining forces with corporations helps them quickly reach higher budgets, a large number of new customers and establish their status as a central force in the market.

Meanwhile, the capital market showed signs of recovery in 2017. A number of successful IPOs turned the stalled market back from the pits it had fallen into. Although the overall activity was weak, the yields were exceptionally favorable. Despite the ongoing recovery in the market, this year ended with fewer IPOs than the multi-year average. The rate of IPOs continues to be slow, and many of the companies that have gone public in recent years have disappointed investors and traded in values that did not reflect the hopes investors had placed in them.

The early stage slump

Early stage investors provide the financing and mentoring needed for entrepreneurs to test their technology and reach targets. But for several years, investors have not been eager to fill this role. **There has been a drop in seed investments compared with the peaks recorded from 2014-2015.**

There are a few reasons for this: the continued "bubble burst" trend, excessive valuations, companies that do not justify their promises and unicorn status, **technology giants that can destroy startups' success** in a moment when launching a new feature **and the slump in the capital market.** In addition, **investors are more reluctant than ever to invest in "fresh" entrepreneurs with no previous track record.**

In mid-2015, the startup market started showing signs of fragility. Fidelity and Blackstone, two funds that have invested major fortunes into private companies, released reports indicating heavy delusions of value of large private companies like Dropbox, Snapchat and others. Despite the peak of the first half of 2016, we are seeing a continuing trend of market equilibrium and devaluation of overstated companies. Undoubtedly, this affects non-traditional investors' willingness to invest in the startup world.

In the past, investors used the "spray and pray" method — they would invest a small sum of money in many startups and hoped that some of them would achieve a dazzling success that would return the investment (and more) for the money spent on all the other startups.

Today, the model has shifted towards a small number of investments that raise bigger sums of money, but at a price. The bar for getting initial financing is much higher. Even if an early stage company does get an investment, in many cases the money is "more expensive" than in the past, meaning investors demand more equity than before. The result is that founders get more diluted in early stages and don't have much equity left to allocate in growth stages.

We may be looking at a more mature market, in which investors are not looking for the next killer app. In the beginning of the transition to a "mobile-first" world, it was exciting. But now that the situation has settled, it is harder to excite consumers. Instead, **investors would rather invest in B2B startups whose customers have substantial financial resources and offer stable cash flow**, instead of consumers who change their taste regularly.

Investors want startups that can lead and dominate high entry barrier markets such as insurance tech, industrial industries, the automotive domain, etc. They have no patience for startups with less ambitious aspirations. They crave for the startup version of "winner takes all." Since previous startups have already received huge amounts of funding and taken control of many markets, it is hard to find a truly innovative business concept and model with such broad success.

So, while launching startups is easier and cheaper than ever before, the long-term implications of the current investment climate are that fewer startups will survive the early stages or even see the light of day as an established startup. Imagine if early stage Facebook had to raise money in the current investment climate: It likely would have been able to. But maybe not. For example, Facebook didn't have a monetization strategy for a long time. That probably wouldn't hold ground today. It should also be remembered that early investors enjoy the advantage of investing in a small amount, in exchange for more equity.

It is also possible that a lot of early stage rounds weren't announced or that early stage startups turned to new financing methods such as initial coin offerings (ICOs). This new fundraising vehicle took off in a major way this year. ICOs around the world raised more than $4B in 2017. In recent months, there have been over 170 new ICOs each week. But this craze may not last forever: As we'll discuss later in the report, some startups using ICOs are taking advantage of loose regulations to administer scams and many don't have a solid business plan.

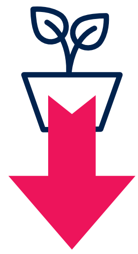
Young startups that do not belong to the blockchain world and have difficulty raising money from VC investors can turn to other investment channels such as equity crowdfunding. Since ICOs have created so much interest from the general public, some of them may look into getting into equity crowdfunding investments: Now, it may be perceived as a safer and more regulated investment channel.

Another possible solution to the early stage slump is to return to the previous model of smaller funds that invest in a lot of startups in the hope of more exits and faster exits so that the total amount will come out quite high. Of course, those smaller funds should better filter startups in today's uncertain market and be careful not to invest in companies without a solid business model or strong team.

Israeli market overview

2017

More money fewer seed rounds

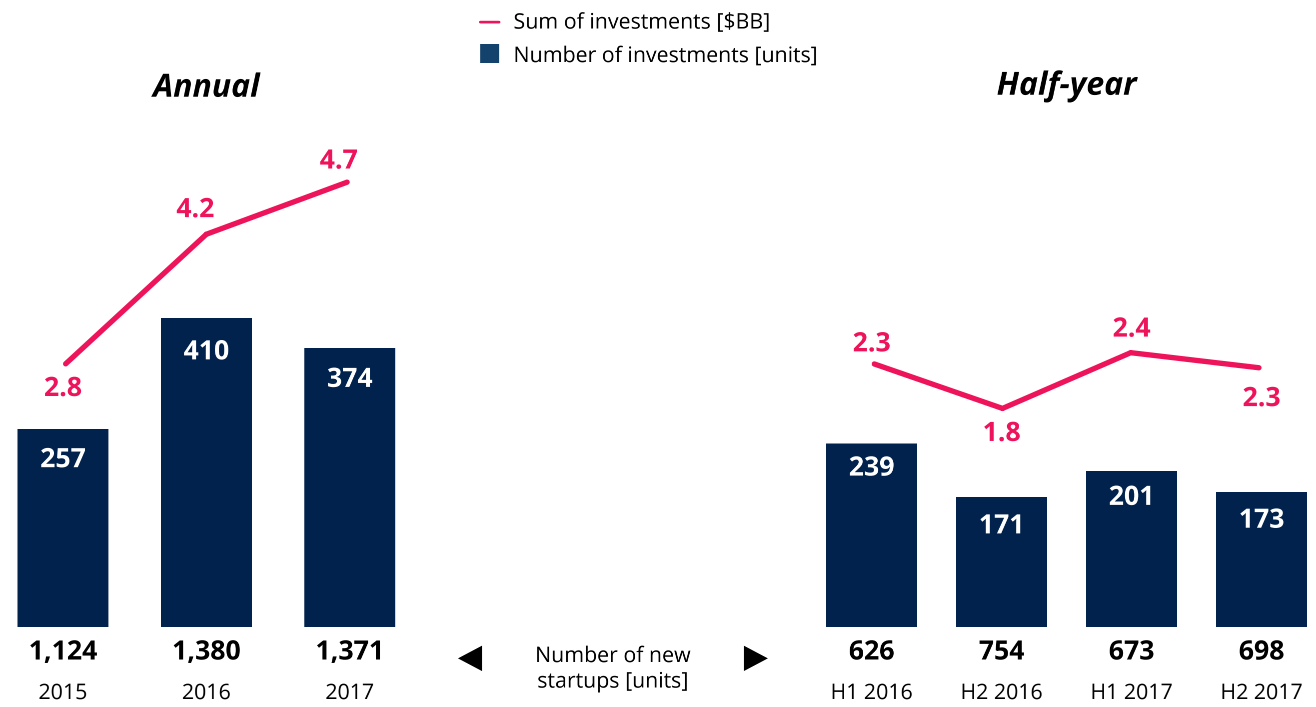


2017 was a good year for Israeli startups in terms of the sum of money they managed to raise. It ended with 374 funding rounds that amounted to $4.72B capital raised. In comparison, in 2016, there were 410 rounds that raised a total of $4.17B. **This is a 13% increase from last year in total capital raised but a 9% decrease in terms of the number of rounds.** This correlates with a global decline in the number of investments. As we mentioned in our previous report, Israel is not an island. Global politics and economic events affect it. In the past, Israel tended to be around half a year behind global shifts in the tech market. But it seems that this year, it caught up with global trends faster.

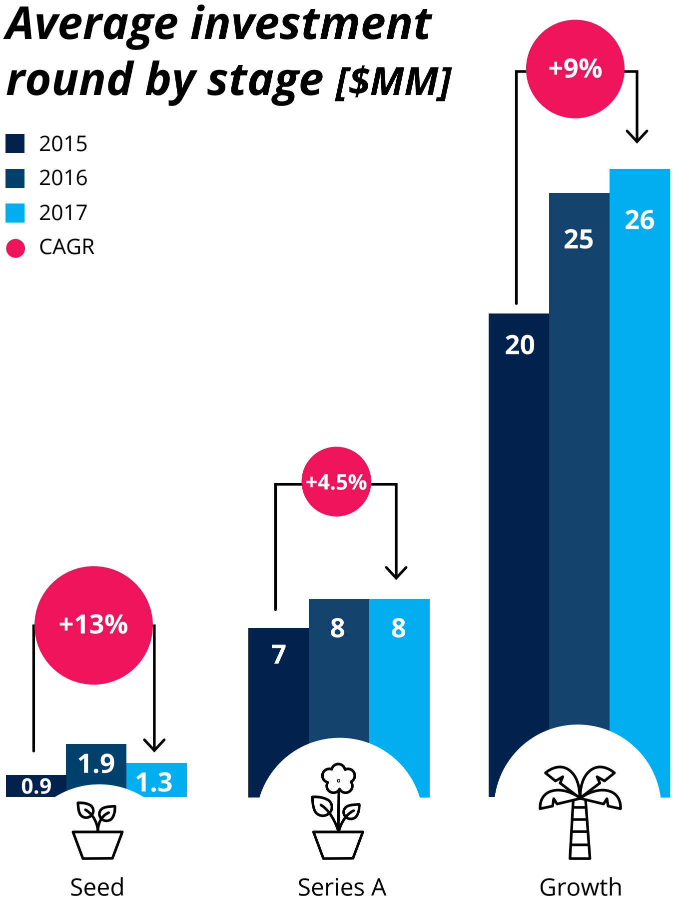
Looking at the trends of 2016-2017 half-years, the number of startups and investments appears to be broadly similar over this period, but there was volatility in the sum of money raised. Now, let's review each half-year on a deeper level: We see a peak period (H1 2016), a significant fall (H2 2016) and then a recovery and growth period (H1 2017) followed by a small fall (H2 2017), softer in comparison to H2 2016.

The first half of 2017 showed signs of recovery compared to the previous half, with 17% growth in the sum raised and 18% in the sum of capital raised. But then again, in H2 2017 there was a drop in investments: a 4% drop in the sum of investments and a 14% drop in the number of investments. So, when comparing these four half-years, H1 2016 stands out as the most successful of them all in terms of the number of investments; A time when the bubble burst of 2015 still hadn't caught up with Israel. But H1 2017 was the most successful in terms of the sums raised.

Number and sum of investments [2015 - 2017]



Average investment round by stage [$MM]



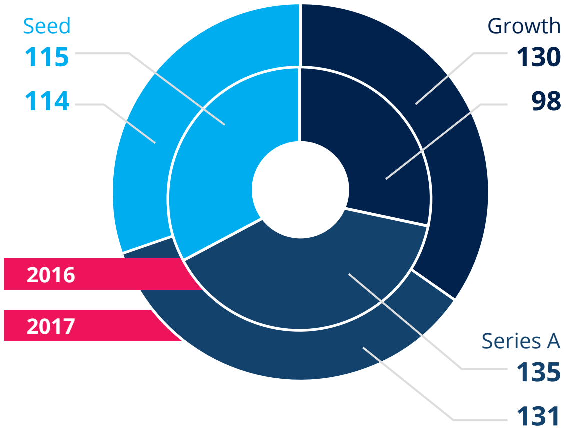
In the past three years, there has been a general increase in the average sum raised in a funding round. This is mainly due to the jump in average round sums between 2015 and 2016. When looking closer at 2017, we see that the Seed rounds dropped by 31% in comparison to 2016. Looking at the last three years, 2017 seemed to return to a moderate increase trend, with a CAGR of 13 percent. In terms of Series A, there was stagnation, while Growth had a moderate upward trend.

There were 245 early stage investments that raised $1.19B in 2017, in comparison to 250 in 2016 that raised $1.35B. This represents a total stagnation in the number of investments in early stage startups and a 12% drop in the sum of money invested in them. It makes sense that investors felt the need to invest in lower valuations than in the past due to disappointing results from startups that raised huge sums. As a result, there was more or less the same number of rounds but the sum of money declined.

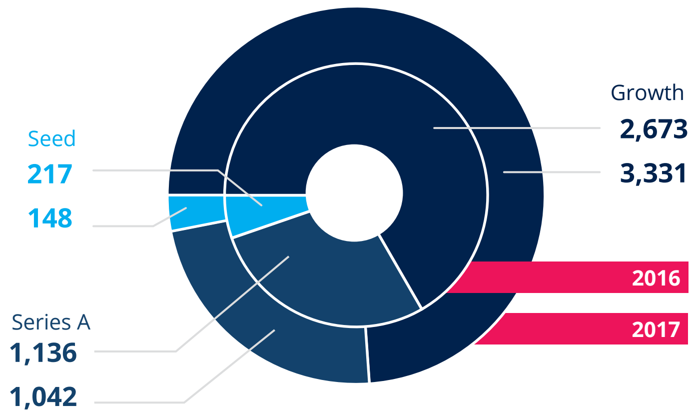
To determine where the difficulty in raising early stage financing lies, it depends on what you measure. In terms of the sum of investments, there was a whopping 32% drop

Number of funding rounds and sum of investments change by company stages [2016 - 2017]

Number of investments [units]



Sum of investments [$MM]



in Seed investments in 2017 in comparison to 2016, whereas there was only an 8% drop in Series A during that time. However, when counting the number of investments, there were only slight declines in Seed (-1%) and Series A (-3%) from 2016 to 2017. In other words, more early stage startups raised money this year than the previous one but they raised a lot less money.

It is also worth mentioning that more early stage startups are also targeting businesses rather than consumers. **According to our data, in 2016, more than one-third of early investments were B2C while in 2017, only one-quarter were B2C.** This means that more early stage funding capital went into B2B startups. As we noted in the chapter on global investment trends, as part of investors' desire to invest in safer investments, they preferred to invest in startups that were not based on the changing tastes of the public but rather, on large organizations with substantial budgets and long-term plans.

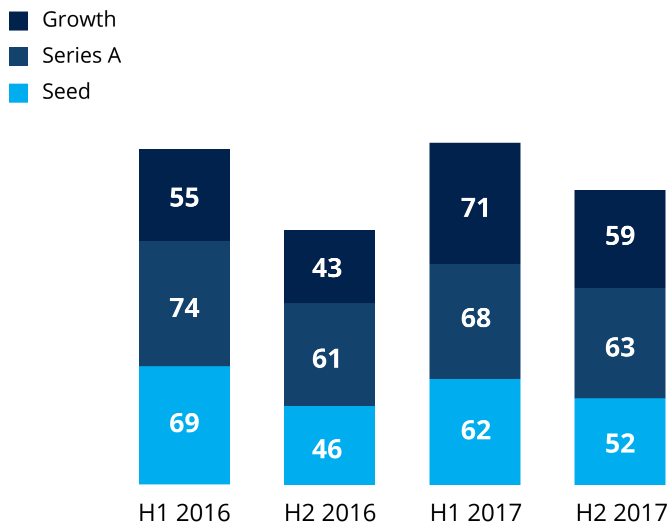
We remember a lot of huge funding rounds from 2016, but in aggregate, there were more mega-rounds and in general, more growth funding rounds in 2017 than in 2016. There were 130 growth stage investments that raised $3.33B in 2017 in contrast to 98 growth rounds in 2016 that raised $2.4B. It seems that the global trend of immense increases in sums of money raised by growth startups has reached Israel as well.

Looking closer at the half-years, we see 115 early stage investments in H2 2017, a 12% decline from H1 2017, which had 130 investments of that kind. But the real drop is in the sum of investments: Early stage startups only managed to raise $484M in H2 2017 in comparison to $707M in H1 2017, a 32% decrease. That said, H1 2017 was an improvement over the disappointing H2 2016, showing a 21% increase in the number of investments and an 18% increase in the sum of investments.

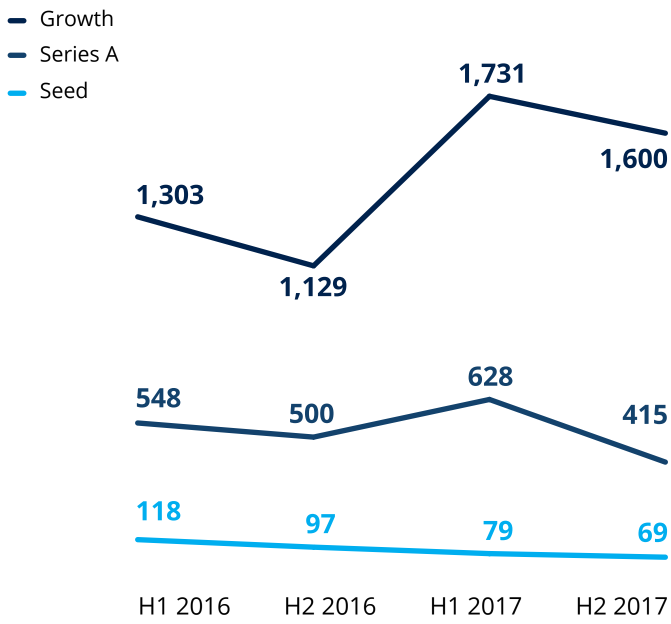
There were 59 growth stage investments in H2 2017 that raised $1.6B, while in the previous half-year, there were 71 investments that raised $1.73B. This represents a 17% drop in the number of investments and an 8% decline in the sum of investments. But H1 2017 did show a staggering 53% increase in the sum of growth investments over H2 2016 and a 65% increase in the number of investments.

Number of funding rounds and sum of investments change by company stages [2016-2017]

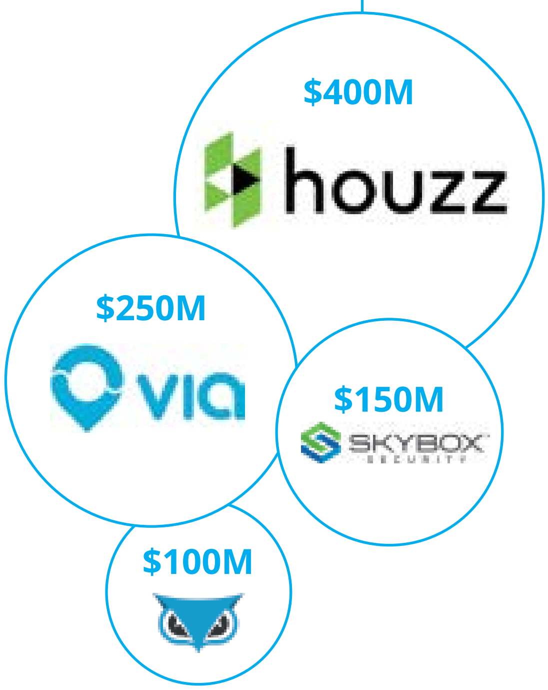
Number of investments [units]



Sum of investments [$MM]



Major funding rounds
[2017]



Mega-rounds

Houzz, which has headquarters in California but also operates a development center in Tel Aviv, managed to raise the impressive sum of $400M in one round led by Iconiq Capital, with the participation of GGV Capital and Sequoia Capital. Houzz's platform connects users who want to build or renovate their home and professionals in the field. The company recently launched an AR tool that allows users to see in real time how their furniture and design items will look with their iPad application. The company also launched a tool that uses deep learning technology at the end of last year.

Via, a ride-sharing services company, raised a $250M Series D from Daimler, which is responsible for brands such as Mercedes-Benz and Smart Automobile, and existing investors like Pitango Venture Capital. The company uses algorithms to solve complex mathematical, computational and operational problems to adapt vehicle routes to passengers' needs. The investment is part of the deepening relationship between Via and Daimler, expanding their collaboration into a European joint venture that will offer Via's services in London and other cities.

On the cyber security front, **Skybox Security**, which develops software and tools to assess risks and threats in enterprise computing systems, announced the completion of a $150M financing round. It was led by the CVC Growth Fund, a private equity fund that manages $1B in capital and invests in high-growth technology companies, and Pantheon, a global investment firm that invests in financial assets, technology and infrastructure. The current round comes after a $96M round raised by the company last year. Skybox intends to use the capital to expand global marketing and sales activities, and to continue developing the product platform and possibly for M&A deals. The investment will also allow the company to focus on segments like cloud security management and OT networks that control critical infrastructure.

Another huge funding round that happened in 2017 came from **Cybereason**, also a cyber company. The startup offers an endpoint detection and response platform that leverages big data, behavioral analytics and machine learning to automatically track complex cyber attacks in real time. Cybereason raised $100M from Japanese technology giant SoftBank. This was the largest investment round in the startup's history and one of the largest in the history of Israeli cyber security.

Other prominent and heavily-financed rounds this year included INFINIDAT, Vroom, WalkMe, Kaminario and Innoviz Technologies. They operate in different sectors, such as transportation and storage, but all turn to enterprises as their customers.

New funds

83North completed a $250M fundraising process for its fourth fund within a particularly short period of three months and experienced over-demand. Among the investors in the fund are American institutional investors, most of whom have invested in the fund since its establishment. 83North divides its investments between Israel, Europe and the United States and has two offices in Herzliya and London. The new fund will focus on early stage investments, but has a mandate to invest in all stages of a startup's life cycle. The new fund will prioritize several areas of investment: fintech, software, computing infrastructure, storage, cloud, cyber, IoT and more.

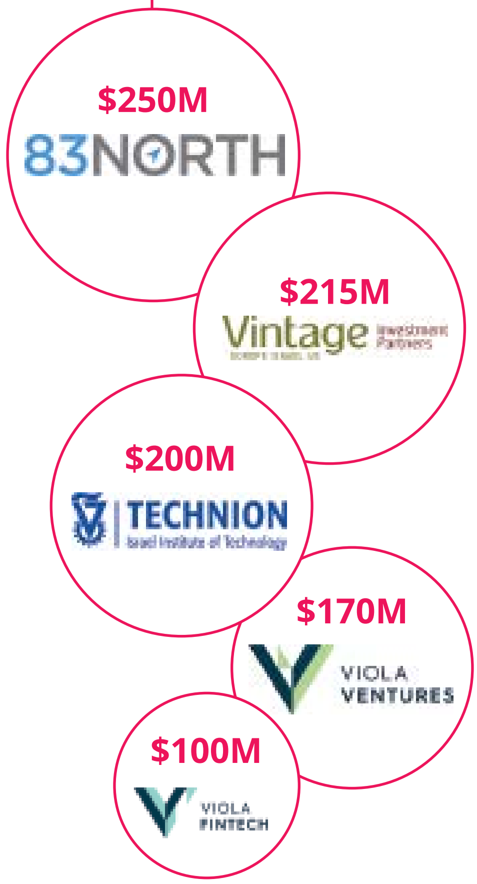
Vintage Investment Partners is an Israeli fund of funds, secondary fund, and late-stage co-investment group focused on technology investments in Israel, Europe and the U.S. In August, it announced the completion of a $215M round for its tenth fund, the largest secondary fund of Vintage. Most of the capital came from financial institutions in Canada, the U.S. and Israel. The purpose of the fund is to help organizations that do not specialize in technology but wish to benefit from its success. Vintage's five funding rounds over a four year-period have made it one of the largest funds in Israel. Among its investees are JFrog, Payoneer, Yotpo, ForeScout, Ravello and Cellwize.

The Technion launched a $200M fund to invest in Technion students and graduates who have launched Israeli startups. The new fund was created as part of a joint venture between the Technion Research and Development Fund (TRDF) and UG Capital Management (UGC), a fund management company based in Hong Kong. The joint fund management team will operate from Israel and Hong Kong, with Israeli representatives including Eddy Shalev, Dr. Eyal Kishon and Gary Ganot, founders of venture capital fund Genesis Partners.

Quite a few other Israeli and foreign VCs raised significant sums of money for new funds that will enable them to continue investing in innovative Israeli startups, including Grove Ventures, Qumra Capital, Mangrove, StageOne, JAL Ventures, Israel Secondary Fund, YL Ventures and Maniv Mobility.

The Viola Group, which is considered a large fund in Israel for private investments that promote technology, announced that it is establishing the first global fintech fund to operate from Israel. It will be called Viola Fintech. The new fund has completed a $100M initial round raised from Scotiabank (the third largest bank in Canada), the American insurance corporation, Bank Hapoalim and more. The fund will rely heavily on partnerships between financial corporations and fintech companies in various stages of growth in Israel and abroad. This cooperation seeks to give the fund a double advantage: both in identifying solutions to the problems faced by these corporations in the financial environment, and in exposing the companies in which the fund will invest in to these corporations in a manner that may accelerate their growth.

New funds [2017]



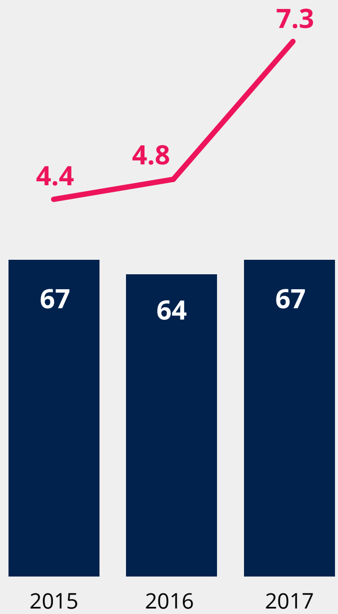
Carmel Ventures, part of the Viola Group, rebranded as Viola Ventures and raised $170M to its fifth fund. The fund, which until now has invested in prominent technology companies such as Playbuzz, Outbrain, Payoneer and others, will invest in Seed, Series A and Series B rounds.

This year, a different kind of fund joined the traditional VCs in Israel: **SPiCE VC**. It invests in blockchain companies and uses this technology itself. In October, SPiCE announced the launch of the first ever "Token Sale" of a venture capital fund. It offers immediate liquidity in a market that to date has been one of the world's least liquid markets. The tokens will be marketable and will give their owners their share of net exits' revenues, eliminating the biggest barrier for technology fund investors: a 7-10-year-long liquidity period. The fund will focus on investing in companies that are in the pre-IPO round or prior to a token sale.

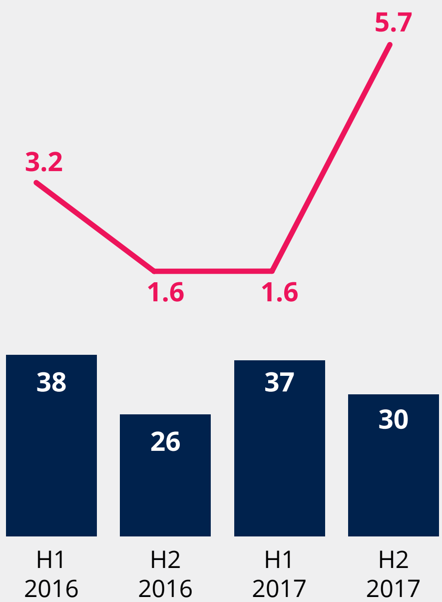
Number and sum of M&As [2016-2017]

Total sum of M&As [$BB]
Number of M&As [Units]

Annual



Half-year



M&As

Sixty-seven Israeli startups were acquired in 2017 for a sum of $7.3B. In comparison, in 2016 there were 64 M&As worth $4.8B. This represents a 53% growth in the sum of M&As compared to 2016 but a decrease of 11% in the number of M&As. This means that fewer M&As were made, but in general, the deals were much more profitable than the previous year.

The tremendous growth in M&As in 2017 is mainly due to the record-breaking second half of the year, during which 30 startups were sold for $5.74B. This exceeds the previous record of H1 2016 in terms of sum raised, which was $3.2B, and is the highest recorded sum of funding per half-year raised in recent years.

HPE, the enterprise computing giant and cloud services provider, acquired **SimpliVity** for $650M. The company was founded by Israeli serial entrepreneur Doron Kempel, who had already sold a company to IBM for $200M. Although it is headquartered in the U.S., it has a branch in Israel. SimpliVity is considered one of the pioneering companies in the field of hyperconverged infrastructures and its mission is to simplify IT. About three years ago, SimpliVity launched its flagship product, OmniCube, which includes integrated server management technology,

Top Israelis M&As [2017]

\$450M
ARGUS CYBER SECURITY

\$500M
PLARIUM

\$650M
simpliVity

\$15.3B
MOBILEYE

server virtualization, backup system management and communications networks. Since then, it has experienced impressive growth: In 2014, the company's revenue grew by more than 500 percent from the year prior. It has established a global marketing network through distributors in 50 countries and has opened local offices with its own employees in 18 countries.

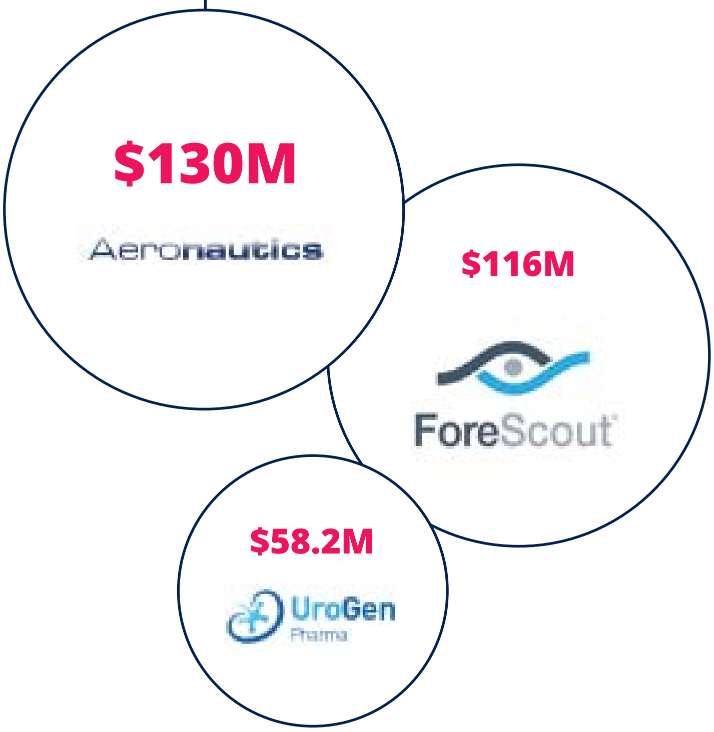
Australian company Aristocrat Leisure acquired one of Israel's biggest gaming companies, **Plarium**, for \$500M in cash. The Israeli company, which developed strategy games for browsers, Facebook and mobile, was founded in 2009. It is self-financed and enjoys revenues estimated at tens of millions of dollars a year from more than 250 million registered users.

Argus Cyber Security was acquired by Continental, one of the world's largest manufacturers of components for the automotive world, for an estimated \$450M. Argus develops a security system that protects vehicles and its components from cyber attacks on the most critical vehicle systems that include brakes, steering and engine.

The past few years have been good to the Israeli automotive industry. Among other things, **Mobileye** was sold to Intel for \$15.3B; Companies like GM and Intel have opened autonomous vehicle R&D centers in Israel; And companies like Gett and Via have raised hundreds of millions of dollars towards growth. The acquisition of Argus is another step towards fulfilling the promise of Israeli innovation in this field. In the past three years, the only M&As we've seen in the field were those of Juno and Streetsmart, which were acquired by Gett, another Israeli company. Although Mobileye sold for a huge sum, because it was already a public company, we do not include Mobileye in our annual M&As list. This makes Argus' acquisition a strong signal of interest from foreign companies, which may likely acquire more Israeli technologies and knowledge in the automotive field.

There were a few prominent investors who excelled this year in terms of the M&As and IPOs of their portfolio companies. Accel invested in both SimpliVity, which was acquired by HPE for \$650M and in ForeScout, which IPOd at an \$800M valuation. Pitango Venture Capital also invested in ForeScout as well as in Skycure, which was acquired by Symantec for \$280M. Finally, OurCrowd invested in four startups that were acquired in 2017: Argus (for \$450M), Nanorep (for \$45M), MentAd (for \$9M) and Shopial.

Top Israelis IPOs [2017]



IPOs

Fourteen Israeli companies went public in 2017 and raised $496M. This is the most fruitful year for IPOs in terms of the number of IPOs in the past three years: In 2016, there were only three which raised $14M and in 2015, there were 12 that raised $719M. However, as we can see, startups that IPOd in 2017 raised 31% less money than those that went public in 2015.

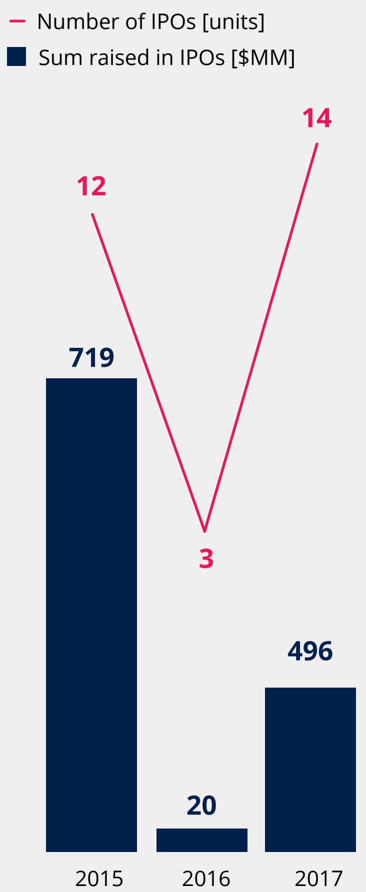
In June, the manufacturer of UAVs and intelligence systems **Aeronautics** went public on the Tel Aviv Stock Exchange (TASE) and raised $130M at a value of $280M. It was the biggest IPO in TASE since 2011. Aeronautics provides integrated turnkey solutions based on unmanned aerial systems, payloads and communications for homeland security, defense and civil applications. However, in November their stock dropped by 20-40% when it became known that the Israeli police had announced the company was under criminal investigation. The investigation concerns a deal the drone maker signed with a “key customer.”

ForeScout, a leading provider of real-time network security solutions, started trading on NASDAQ in October. The company, which was founded in 2009, raised $116M at a $800M valuation. The system developed by ForeScout helps organizations increase productivity and connectivity by allowing access to enterprise network resources from anywhere and when needed without compromising enterprise security. Its automated solutions for network access control, mobile device security, endpoint compliance and threat prevention accelerate the speed of information technology while eliminating actual threats and reducing costs as a result of technical failures. Today, the company's system is installed among Fortune 1000 companies and government organizations in Israel and abroad.

Since its inception, ForeScout had raised over $120M from Pitango Venture Capital and American funds Accel, Amadeus, Meritech Capital Partners and Wellington Management Company LLP. Its last financing round was completed in January 2016, when it raised $76M. Following this round, the company's value was estimated at $1B, which means that the company went public at a lower value than expected.

UroGen Pharma, a clinical stage biopharmaceutical company offering local urology therapies, raised $58.2M at a $150M valuation on NASDAQ. The company focuses on the development of solutions for several forms of non-muscle invasive urothelial cancer, including low-grade bladder cancer, carcinoma in situ (CIS) bladder cancer, and low-grade upper tract urothelial carcinoma (UTUC). In the past it had raised $8.5M from Pontifax and other investors.

Number and sum raised in IPOs
[2015 - 2017]



Number of Israeli IPOs per stock market

2016	2017
ASX 1	ASX 5
TASE 1	NASDAQ 4
LSE 1	TASE 4
	LSE 1

Leading investors

in Israeli startups

The Israeli VC investment market is not resting for a moment. This year, unlike previous years, we saw an increase in the number of new investors who injected financing into Israeli startups.
More than 380 new investors joined funding rounds. It is worth mentioning Glilot Capital, an Israeli VC, which won first place in the world performance comparison index of VCs.

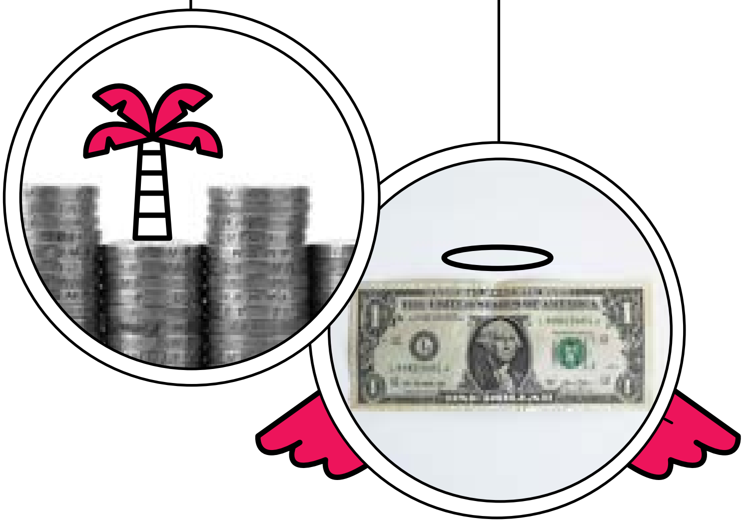
Early stage investors

In the Early Stage Investors Index, we took into account data reflecting this level, such as the number of investments by each investor, the amount raised in the rounds in which the investor participated, whether or not the investor made follow-on investments, whether or not the investor led the financing round and other relevant data.

The top five investors in this category were Vertex Ventures, OurCrowd, TLV Partners, Magma Venture Partners and iAngels. None of these investors were among the top five early stage investors last year.

Vertex Ventures made 11 early stage investments, including in Axonius, DataRails and Taranis. Vertex Ventures Israel was founded in 1997 and is one of Israel's leading venture capital investment firms, with over $700M under management. The firm invests in Israeli companies in the early stages of development that have proven leadership abilities for achieving success.

2016	2017
Bessemer Venture Partners	Vertex Ventures
Sequoia Capital	TLV Partners
Shlomo Kramer	OurCrowd
OurCrowd	Magma Venture Partners
Magma Venture Partners	iAngels



Growth stage investors

The top five investors in this category were Sequoia Capital, Pitango Venture Capital, Bessemer Venture Partners, Viola Ventures and Battery Ventures. Bessemer Venture Partners and Viola Ventures are the only newcomers on the list.

Sequoia Capital made seven growth stage investments this year: in Lemonade, Puls, BigPanda, Signals Analytics, Houzz, Mintigo and Kaminario. Sequoia Capital is a venture capital firm specializing in incubation, seed stage, early stage, and growth stage investments in private companies. It also invests in public companies. The firm seeks to invest in all sectors, with a focus on energy, financial, enterprise, healthcare, internet and mobile startups.

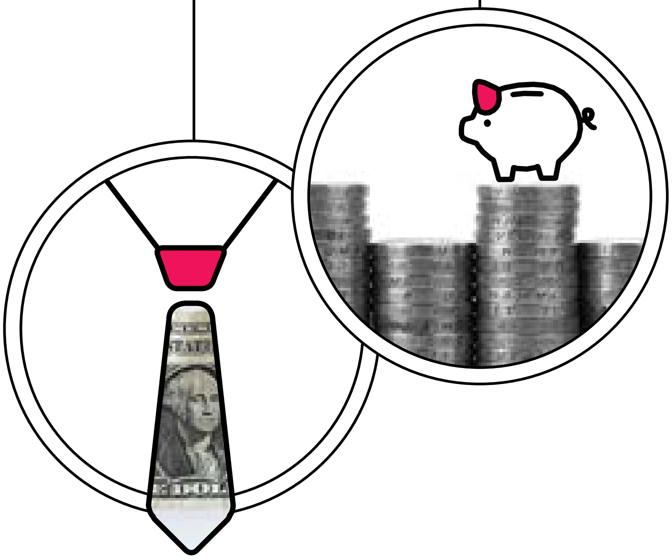
2016	2017
83North	Sequoia Capital
Pitango Venture Capital	Pitango Venture Capital
Battery Ventures	Bessemer Venture Partners
Lightspeed Venture Partners	Viola Ventures
Sequoia Capital	Battery Ventures

Angel investors

The top five angel investors in this category were Mickey Boodaei, Rakesh K. Loonkar, Zohar Zisapel, Eyal Gura and Shlomo Kramer.

Mickey Boodaei made three investments in 2017: in Excelero, Armis Security and Transmit Security. Mickey Boodaei serves as Chief Executive Officer of Transmit Security. He has been a member of the technology advisory board at HSBC Holdings plc since January 2017. Boodaei is a fintech and cyber security entrepreneur and private investor. He co-founded Trusteer and served as its Chief Executive Officer. Boodaei also co-founded Imperva in April 2002, where he served as a vice president of technical services and product management and also served as its vice president of sales for EMEA.

2016	2017
Oren Zeev	Mickey Boodaei
Shlomo Kramer	Rakesh K. Loonkar
Rakesh K. Loonkar	Zohar Zisapel
Mickey Boodaei	Eyal Gura
Moshe Lichtman	Shlomo Kramer



Corporate investors

The top five investors in this category were Samsung Catalyst, Dell Technologies Capital, Qualcomm Ventures, Samsung Ventures and Microsoft Ventures.

Samsung Catalyst is Samsung Electronics' evergreen early stage VC fund supporting automotive, digital health, IoT, AI and cloud infra. It made three investments in Israeli startups in 2017: Innoviz Technologies, Autotalks and Valens Semiconductor. Interestingly, all three companies deal with transportation and autonomous vehicle technologies. This isn't surprising since Samsung has long professed its willingness to enter the steamy field of connected and "smart cars." Samsung wishes to promote the autonomous vehicle vision so that it can connect these new vehicles to its media and content offerings, which will get a front seat opportunity. Individuals will have much more free time to focus on content once they just have to sit in the car, and no longer need to drive it.

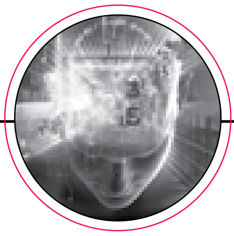
2016	2017
Qualcomm Ventures	Samsung Catalyst
SanDisk Ventures	Dell Technologies Capital
Intel Capital	Qualcomm Ventures
Salesforce Ventures	Samsung Ventures
Deutsche Telekom Capital Partners	Microsoft Ventures

Private equity investors

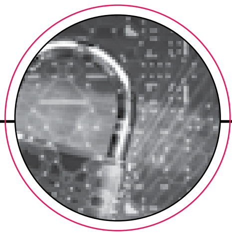
The top five investors in this category were Viola Ventures, OrbiMed, Viola Growth, Clear Future and CVC Capital Partners.

OrbiMed made seven investments in 2017: in RDD Pharma, MobileODT, Azura Ophthalmics, LogicBio Therapeutics, Mitoconix Bio, BIOMx and SteadyMed Therapeutics. OrbiMed is a dedicated healthcare investment firm with investments ranging from biopharmaceuticals to medical devices, diagnostics and healthcare services. The healthcare industry's powerful growth profile coupled with its magnitude and complexity creates myriad investment opportunities at many different nodes of the healthcare delivery system.

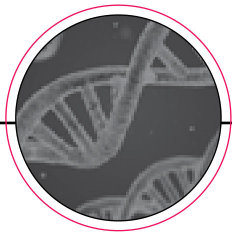
2016	2017
GlenRock Israel	Viola Ventures
Viola Credit	OrbiMed Int.
Viola Growth	Viola Growth
Technology Crossover Ventures (TCV)	Clear Future
Susquehanna Growth Equity	CVC Capital Partners



AI

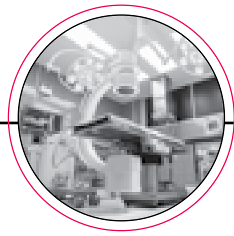


Cyber security

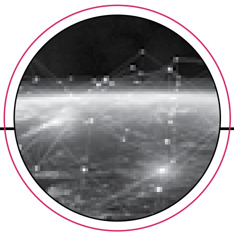


Life sciences

Pharmaceuticals



Medical devices



Transportation and
autonomous vehicles

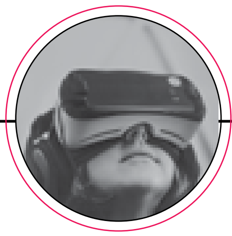
Fintech

Sector spotlight

Blockchain

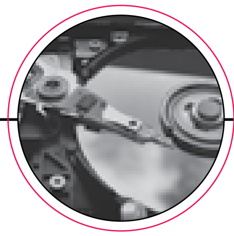
Data analysis

Industrial technologies



VR/AR

Drones



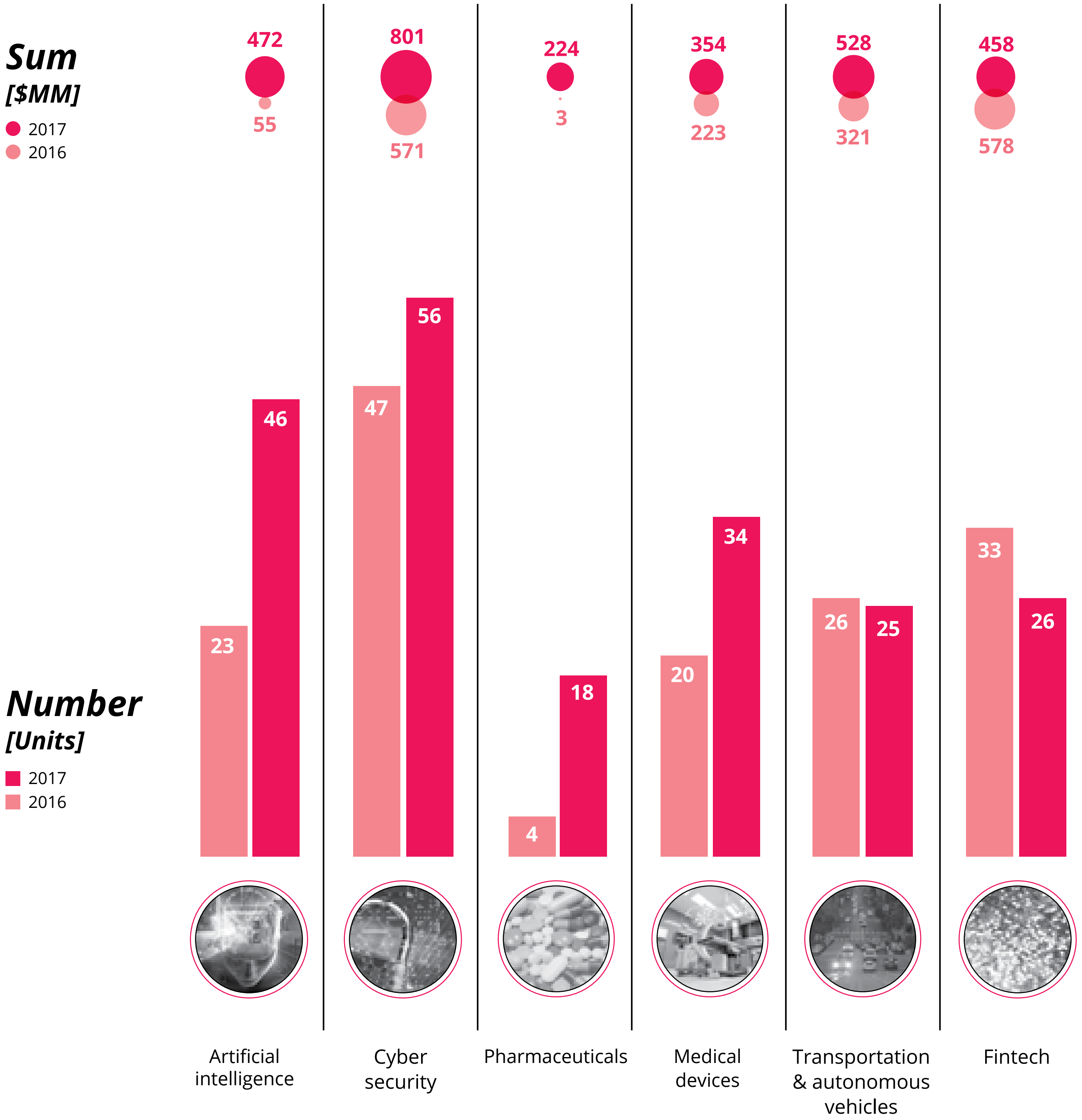
Storage

Leading sectors

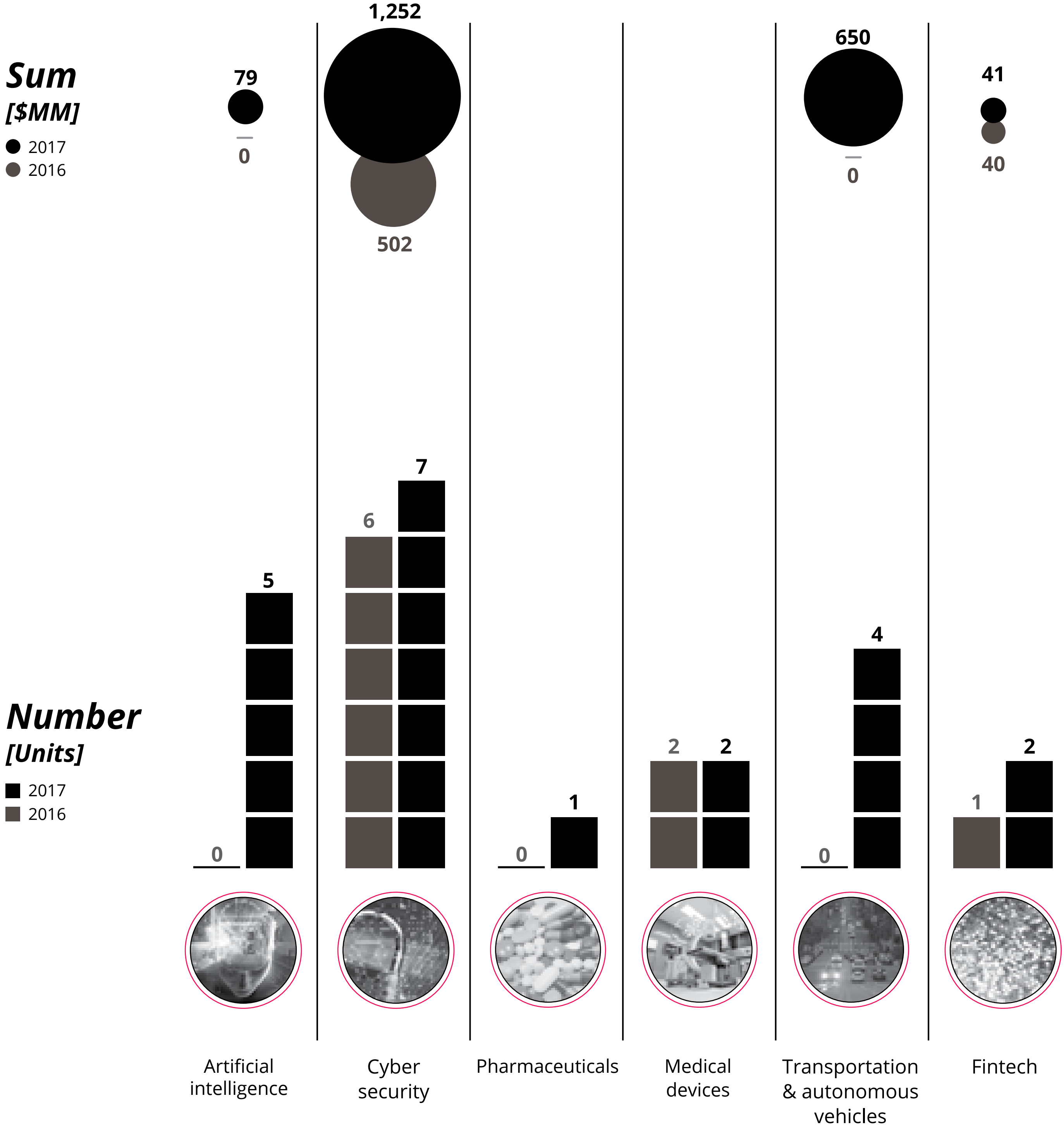
While reviewing this year's investments and exits, we decided to explore some of the sectors in more depth in order to focus on the most active and prominent fields in the Israeli startup ecosystem. We did this to understand the trends and identify which sectors are growing or shrinking. Among those we have explored this year, you can find the usual suspects, including cyber security, IoT, adtech, and life sciences alongside newer and “hotter” trend sectors such as fintech, transportation and autonomous vehicles.

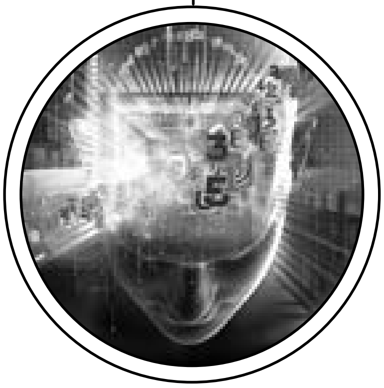
Israeli startups
Deal overview

Investments



M&As


Sum
[$MM]
2017
2016
79
0
1,252
502
650
0
41
40
Number
[Units]
2017
2016
0
5
6
7
0
1
2
2
0
4
1
2
Artificial intelligence
Cyber security
Pharmaceuticals
Medical devices
Transportation & autonomous vehicles
Fintech

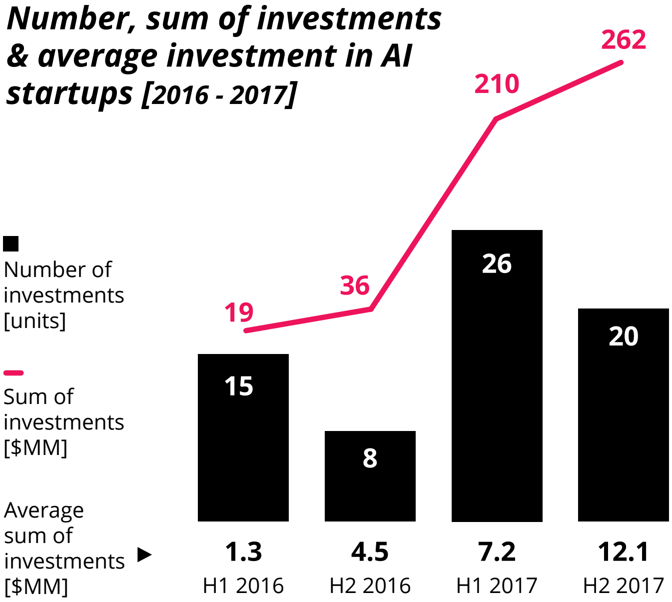


Artificial intelligence

In the past two years, AI has been experiencing insane growth. If big data was all the rage and the favorite buzzword before 2016, AI has since taken over, becoming the industry's and media's obsession. From Google's DeepMind's software triumph over a legendary South Korean player of Go, through two high profile acquisitions — that of Viv, a Siri developers' AI company, by Samsung and Maluuba by Microsoft — to Ford's $1B investment in the field, AI is making headlines. The struggle to recruit expert AI talent keeps getting tougher.

Technology companies and researchers today have more ambitious goals for AI than in the past. They are not only interested in AI tools that know how to act according to the exact criteria given to them, but also learn from experience and reach conclusions and insights on their own. This is one of the main reasons for the extensive use of AI technologies in a wide range of areas such as agriculture, health, manufacturing, automotive, marketing and so on. Advances in the areas of autonomous vehicles, robotics and drones will continue to move the field forward at maximum acceleration.

Number, sum of investments & average investment in AI startups [2016 - 2017]



Therefore, it is not surprising that the number of investments in the AI sector continued to break records in 2016 and 2017. So many companies are engaged in the field that soon the term will become irrelevant because all companies will use this technology as a form of basic support.

The centrality of AI is so evident in today's startup and venture capital world that in the future, startups won't be branded as an "AI startup." Instead, most companies will implement AI technologies as part of their operations. The term "AI startup" will go the way of "mobile startup" and disappear from our lives.

In fact, investors are beginning to question any company that does not have an AI strategy. They are interested in investing in solutions that are not only responsive but also know how to draw surprising, all-encompassing conclusions from vast data and provide predictions.

However, unlike mobile, AI requires serious investment in computing power, data aggregation and specific workforce talent. We expect that the costs associated with this sector will continue to decline and this development will enable relatively small players to succeed. If not, it seems that real power in the field will be concentrated in the hands of several technology giants or government initiatives.

The startup nation is considered a global AI leader. For instance, Israeli companies Prospera, Twiggle, Workey, Dynamic Yield, Cybereason, OrCam Technologies, PerimeterX and Gong.io were mentioned in CB Insights' top 100 global AI companies for 2017.

Israel

Israel is one of the most innovative and leading countries in the AI sector. Forty-six Israeli AI startups received $417M in funding rounds, compared to 23 startups in 2016 that only raised $55M. This represents a 100% increase in the number of funding rounds and a nearly 760% increase in the sum raised. As more and more Israeli startups in this sector enjoy the spotlight and headlines, investors are rushing to participate in the celebration of AI Israeli innovation, afraid to lose the chance to invest in the next Mobileye.

Prominent investment rounds & M&As

Some of the most prominent AI funding rounds this year were for Israeli startups operating in the fields of sales and marketing. B2B organizations and consumer brands are increasingly relying on AI and big data technologies to expand their customer base and expand rapidly.

Leadspace, an audience management platform that enables B2B companies to engage with customers better, raised a $21M Series C round from Arrowroot Capital and JVP with the participation of existing investors such as Battery Ventures and Vertex Ventures. The Audience Management platform provides an end-to-end solution for marketing and sales people in the B2B world by characterizing an ideal customer, identifying them, gaining insight into the best way to interact with them, and then enriching existing knowledge bases with up-to-date and consistent information about those customers.

Gong.io developed a system that translates and analyzes sales calls using artificial intelligence and produces a detailed report at the end of each call, helping sales efforts. The company raised a $20M Series A round led by existing investors Norwest Venture Partners and Shlomo Kramer, together with new investors Wing Venture Capital and NextWorld Capital.

Chorus.ai developed an AI-based sales call analysis system that provides managers with quick insights into conversations and sales team performance. It raised a $16M Series A round from Redpoint. The system can find keywords and categorize them into specific topics by using NLP (natural language processing) and machine learning. In the click of a button, managers can see all questions asked or answered by sales representatives and gain insight into difficulties and successes.

Other prominent AI funding rounds in 2017 included ZeitGold and Kryon Systems, AIdoc and Amenity Analytics.

While the pace of AI M&As has steadily grown since 2013, most AI companies sell for below $50 million after raising only a small amount of money. VCs obviously expect a different result — that of multiple exits worth hundreds of millions of dollars.

In Israel, a similar trend happened in 2017. There were five M&As in the field: RealFace, vBrand, Evature, Streetsmart and Next IT. Mostly their sums were undisclosed or low.

Next IT, which provides conversational AI through natural language processing, was acquired by Israeli Verint for $51M. The company's natural language platform is a layer of technology that sits between people and machines to break down communication barriers and deliver both business value and exceptional user experience. Though the company is headquartered in the U.S., it has R&D activity in Israel.

RealFace, acquired by Apple for $2M, offers face-recognition solutions for businesses and consumers with the ability to verify users on mobile and PC effortlessly and securely. RealFace uses facial recognition algorithms based on deep learning, and is primarily intended for smartphones, without additional hardware. Apple is part of a group of technology giants that includes Amazon, Google, Facebook, Microsoft, Intel and Baidu that invest heavily in AI and acquire many startups to stay ahead of the competition.

Leading investors

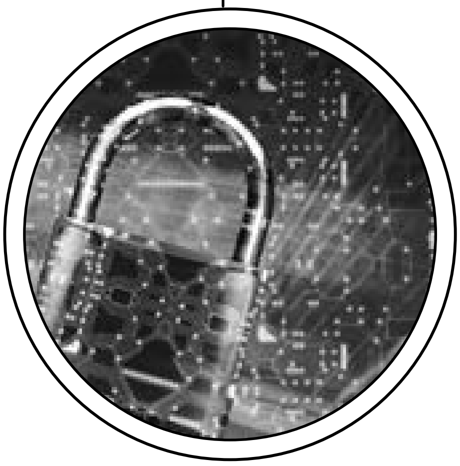
The leading investors in the artificial intelligence (AI) sector in 2017 were Battery Ventures, State of Mind Ventures, Magma Venture Partners, Yahoo! Japan and HV Holtzbrinck Ventures. All of 2017's top five investors were newcomers, which replace the category leaders from the previous year. It's important to note that both Battery Ventures and State of Mind Ventures reached the first place.

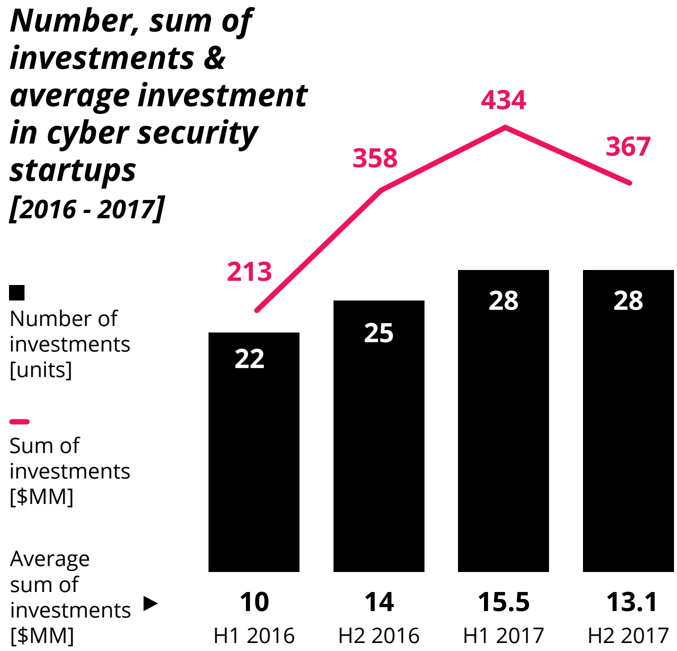
Battery Ventures is a technology-focused global investment firm that invests in various sectors including application software, IT infrastructure technologies, consumer internet and mobile services, as well as industrial technologies. Founded in 1983, the firm backs companies at stages ranging from seed to growth and private equity, and invests globally from offices in Boston, Silicon Valley and Israel. In 2017, it made three investments: in one round of Leadspace and in two rounds of ZeitGold.

State of Mind Ventures is an early stage VC fund investing in Israeli startups in the areas of semiconductors, communications, cloud, big data, computer vision, sensors, robotics and aerospace. In 2017, it made three investments in Israeli AI startups, including Wizer and Amenity Analytics.

Leading investors in the AI sector

2016	2017
Ronald Cohen	Battery Ventures
XL Innovate	State of Mind Ventures
Aleph	Magma Venture Partners
2B Angels	Yahoo! Japan
PLUS Ventures	HV Holtzbrinck Ventures





Cyber security

Cyber security is another sizzling sector. The increasing use of smart IoT devices, the transition to cloud environments and the increasing network connectivity in every domain makes cyber threats more serious, frequent and dangerous to businesses, organizations, devices and individuals. Various cyber attacks can disable entire companies, disrupt proper functioning, risk critical infrastructures, expose sensitive information and even endanger lives.

This year, too, we witnessed serious cyber attacks with wide implications. For instance, In May, a worldwide cyber attack called "WannaCry" unleashed a ransomware crypto worm, which targeted computers running the Microsoft Windows operating system by encrypting data and demanding ransom payments in Bitcoin. In June, the personal information of nearly 200 million U.S. voters was discovered in an unsecured cloud server operated by the political data firm Deep Root. In the same month, it became known that sensitive information of 14 million Verizon customers was exposed online. In July, credit reporting agency Equifax detected and blocked suspicious network activity. Upon conducting a forensic analysis, it was revealed that a massive data breach occurred, affecting 143 million U.S. consumers.

Israel

2017 broke the record for VC investments in cyber security worldwide and in Israel. Israeli cyber security startups raised 56 rounds worth $801M in 2017, while in 2016, the number of rounds was similar (47) but the sum of investments was only $571M. This represents a 40% growth in terms of the sum of money raised and a 19% growth in terms of the number of investments. The average sum for a round rose from $12M to $14M.

Prominent investment rounds and M&As

Two of the largest funding rounds this year belonged to cyber security startups — Skybox Security and Cybereason — but there were several other prominent rounds. SentinelOne raised a $70M Series C from Redpoint, Data Collective, The Westly Group and other investors. SentinelOne's solution is a threat neutralization product that includes cyber detection, response and prevention centered on a single platform based on machine-based automation. With SentinelOne, organizations can detect malicious behavior transversely across vectors and stop them with a fully automatic response system that protects against cyber attacks all the time and in real time. The platform also eliminates attacks from within the system without the need for a specific signature or access through the cloud and is supported on Linux, MacOS and Windows.

Deep Instinct leverages deep learning predictive capabilities to protect against zero-day threats and APT attacks. It helps safeguard an enterprise's endpoints or mobile devices against any threat on any infrastructure, whether or not it is connected to the network or the internet. Deep Instinct raised a $32M Series B from Nvidia, Coatue Management, ATW Partners and Columbus Nova Technology Partners.

The investment in these two companies, which implement AI, machine learning and deep learning technologies to produce sophisticated and faster cyber security tools, is part of a global trend to combine these two sectors. Cyber security is leveraging AI technologies as a new way to deal with sophisticated cyber attacks with increasing frequency. AI can be used to monitor real-time systems and networks, identify unusual patterns, accelerate detection of anomalies, treat threats more efficiently and quickly, and thereby provide better cyber resilience.

There are already two main unicorns in this field: Cylance applies AI, algorithmic science and machine learning to quickly and accurately identify what is safe and what is a threat. Tanium is a security and systems management solution that allows real-time data collection at enterprise scale. It helps enterprises secure, control and manage millions of endpoints across the enterprise within seconds.

Founded by well known cyber security investors Mickey Boodaei and Rakesh K. Loonkar, Transmit Security aims to make biometric authentication simple by connecting users' applications to authenticators such as face/eye/voice recognition, fingerprints and OTP. The company can perform trusted-device binding and primary and secondary authentication, and can respond immediately to security risks. It enables any policy to be deployed instantly, and the platform requires no changes to the application. It raised a $40M Seed round in self-financing from the founders themselves.

Wandera provides companies and organizations with a secure platform for mobile devices to protect information and organizations against cyber crime. Another advantage of the company's platform is the optimization of information and insights in real time, allowing more accurate control over the use of content. The company completed a third funding round of $27.5M, led by Sapphire Ventures. In addition, current investors Bessemer Venture Partners and 83North also participated.

The cyber security market is experiencing a consolidation trend, which is reflected in a long list of M&As in the last two years. Israel also did not remain far from this perspective and showed a significant jump in 2017 in terms of sums gained. Seven cyber security startups were acquired during 2017 and seized the impressive sum of $1.25B through M&As, compared to six cyber security M&As that garnered $502M in 2016. This represents a 149% jump in the capital gained.

The biggest cyber security exit of the year belongs to **Argus Cyber Security**. The Israeli company developed a security system for the automotive industry. It was acquired by the German Continental corporation for approximately $450M, one of the world's largest manufacturers of components for the automotive world. Users such as fleet managers who use the company's command and control platform, Argus Cyber Dashboard, receive an up-to-date snapshot and alerts about cyber threats to their fleet and respond in real time to such situations.

Symantec, one of the leading information security companies in the world, acquired two Israeli cyber security startups in 2017: Skycure for $280M and Fireglass for a sum estimated to be $250M. Skycure offers a solution to secure mobile devices in organizations, which includes protection against malicious applications, network attacks and vulnerabilities in the operating system for Android, iOS and Windows devices. One of the key advantages of the company's solution lies in its ability to run independent protection on iOS and Android, which prevents the device from being taken over to leak corporate and personal information such as passwords, messages and contact information. Unsurprisingly, it uses AI and machine learning to do so. Fireglass allows users to click with confidence from any device by eliminating malware and phishing from web and email with no endpoint agent. Organizations protected by Fireglass maximize user productivity while solving the operational overhead and complexity of web gateways through true isolation, where all traffic is executed remotely and does not reach the corporate network.

Leading investors

Leading investors in cyber security sector

2016	2017
Bessemer Venture Partners	Vertex Ventures
Ascent Venture Partners	YL Ventures
Salesforce Ventures	Blumberg Capital
Cedar Fund	Lightspeed Venture Partners
YL Ventures	Glilot Capital Partners

The leading investors in the cyber security sector in 2017 were Vertex Ventures, YL Ventures, Blumberg Capital, Lightspeed Venture Partners and Glilot Capital Partners. This is the second year in a row that YL Ventures is one of the top five in this category.

Vertex Ventures invested in four Israeli cyber security startups this year, including Axonius and PerimeterX. It was also one of the investors that invested in Argus and LightCyber, both of which were acquired this year. Vertex Ventures was established in 1997 and has over $700M under management. Vertex's three previous funds were part of some of the most prominent exits in Israel, with three exits that occured in the past two years totaling more than $4B: CyberArk, SolarEdge and Waze.

YL Ventures was part of the $4M Seed round in Axonius, which provides a network visibility and control solution. Magma Venture Partners and Zohar Zisapel have both invested in Argus, which was acquired by Continental AG.

Life sciences

The global health industry has experienced a shake-up in recent years and faced many challenges. Shrinking budgets, more elderly and chronically ill patients in developing countries, a growth in the general population size in emerging markets, increasing regulatory interventions and slow business growth rates have all caused life sciences providers to look for different ways to become more efficient. Patients have also undergone a significant change in behavior. Many insist on taking a bigger role in their own care, making individual physicians less autonomous.

Leading investors in the life sciences sector

2016	2017
Peregrine Ventures	Pontifax
INE Ventures	Peregrine Ventures
GlenRock Israel	OrbiMed Int.
OXO Capital Valve Ventures	TriVentures
Pontifax	Israel Innovation Authority

As a result, healthcare organizations are forced to switch to a model that puts the patient in the center, adapt to the digital age and try to do more with fewer resources. They are progressing gradually to a "patient-first" model and value-based care rather than a model that focuses on the volume of medical care. Innovative startup technologies are ranked high amongst answers to these challenges. Another solution is consolidation amongst health organizations, especially hospitals, to generate efficiency gains. Large players in the industry often acquire promising startups to develop their technology further and help them commercialize faster.

The life sciences sector in Israel continues to show remarkable growth, finding its place alongside the typical strongest sectors in the high-tech world: software, hardware, internet and mobile. Investors poured some $903M into the Israeli life sciences sector in 84 funding rounds, a huge leap from “only” $472M in 64 funding rounds in 2016. The most dominant segments in this sector were pharmaceuticals and medical devices.

Pontifax invested in six Israeli life sciences startups this year: Eloxx, LogicBio Therapeutics, CathWorks, EyeYon, VBI Vaccines and ARTSaVIT. Since Eloxx merged with Sevion Therapeutics, it is also part of a big M&A. Founded in 2004, Pontifax is a healthcare-dedicated VC firm with $350M under management. It invests in life sciences technologies in all therapeutic areas and development stages. Its portfolio comprises over 50 companies. OrbiMed, second on the list, also invested in LogicBio Therapeutics. TriVentures, fourth on the list, also invested in EyeYon. Pontifax went up two places from last year and Peregrine Ventures fell one place but retained its position in the top five.

Pharmaceuticals

The global pharmaceutical industry is seeing rapid development thanks to a handful of promising new technologies such as immunotherapy techniques, cancer vaccines and genetic modification. Capital financing for startups working in the pharmaceutical industry has jumped $10B over the past two years and with good reason. **Startups in the pharmaceuticals segment need a lot of capital to go through the lengthy process of clinical trials and drug commercialization.** They too have become more consumer-centered and have realized that successful customer engagement increases their chances of regulatory and commercial success. To address the broader challenges of cost management and pricing, the pharma industry now relies on analytics, cloud computing, automation and advanced data science methods and technologies across the value chain to influence decision-making at all levels.

In Israel, pharmaceutical startups raised $224M in 18 rounds of capital raising during 2017, while in 2016, the number of investments and sum raised by startups in the field was minimal. This growth is propelled by consistent government support and a strong academic base.

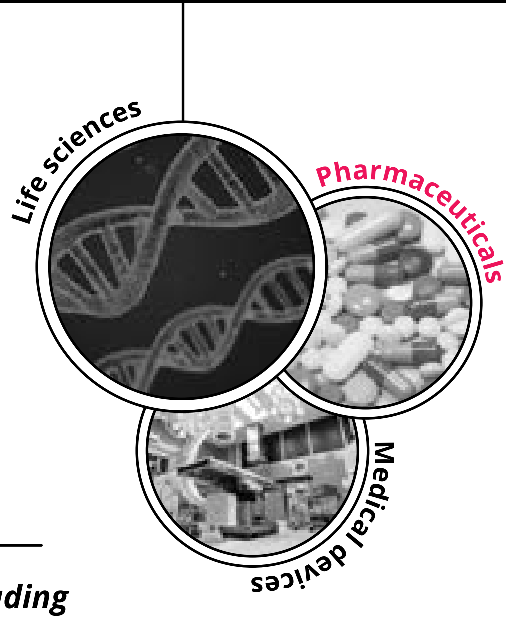
In a single year, **Eloxx Pharmaceuticals**, which focuses on the discovery, development and commercialization of compounds for the treatment of rare genetic diseases, managed to raise a $38M Series C round and merge with Sevion Therapeutics. Under the terms of the agreement, Eloxx will become a wholly owned subsidiary of Sevion. The Series C round was funded by LSP BioVentures, Pontifax, Dr. Phillip Frost, OPKO Health, Catalyst Venture Partners and others. This was the only pharmaceuticals M&A in 2017.

SteadyMed Therapeutics, a specialty pharmaceutical company focused on the development of drug product candidates to treat orphan and high-value diseases with unmet parenteral delivery needs, raised $30M from OrbiMed Israel Partners, Adage Capital Management, Deerfield Management and Kingdon Capital Management. The company developed a PatchPump platform for delivering injectable drugs. The PatchPump is a customizable, pre-filled and pre-programmed disposable parenteral delivery platform for large-volume and viscous formulations. The device attaches to the abdomen and delivers medicine through a small needle on an ongoing basis. Its primary focus at the moment is to obtain approval in the United States for the sale of Trevyent for the treatment of pulmonary arterial hypertension (PAH).

Leading investors

All of the top five investors in this category did not appear on the list last year. Unsurprisingly, the 3 leaders in the life sciences category also lead the pharmaceuticals category, with Pontifax in first place, Peregrine in the second place and Orbimed in the third place. In fourth and fifth place, we find two insurance companies: They invest in life sciences companies in the hope of improving the quality of life of their policyholders and reducing the amount of future life and health insurance claims.

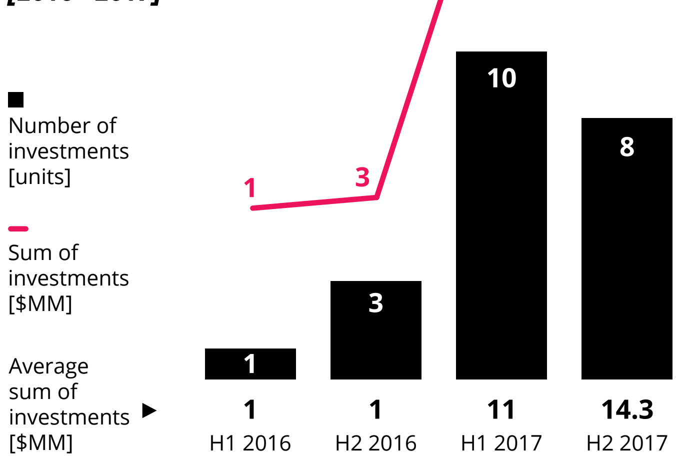
OrbiMed is a dedicated healthcare investment firm with investments ranging from biopharmaceuticals to medical devices, diagnostics and healthcare services. OrbiMed invested in four Israeli pharmaceutical startups this year: Azura Ophthalmics, RDD Pharma, Mitoconix Bio and SteadyMed Therapeutics. Both participated in the $70M post-IPO equity round in VBI Vaccines. The company is a commercial-stage biopharmaceutical company developing a next generation of vaccines to address unmet needs in infectious disease and immuno-oncology. VBI's first marketed product is Sci-B-Vac, a hepatitis B vaccine that mimics all three viral surface antigens of the hepatitis B virus. The company has a complicated history that involves an IPO and an acquisition. It was founded by a Jewish entrepreneur who lives in Singapore and has a manufacturing facility in Israel.



Leading investors in the pharmaceutical sector

2016	2017
BRM Group	Pontifax
Shavit Capital	Peregrine Ventures
GlenRock Israel	OrbiMed Int.
Chaim Hurvitz	Phoenix Insurance Company
Aurum Ventures	Menora Mivtachim Insurance

Number, sum of investments and average investment in pharmaceutical startups [2016 - 2017]



Medical devices

The field of medical devices is expected to show significant growth in the coming years as a result of the rising threat of devastating infectious diseases and the increasing popularity of non-invasive diagnostic practices. Today there are many products that assist various medical processes such as diagnosis, monitoring, injury prevention, rehabilitation and treatment. It is also a hot segment in M&As. Giant companies like Medtronic, Boston Scientific, and Teleflex are competing over acquisitions of medical device startups.

Israel is one of the most active global hubs of medical device activity and it shows in the growth in the number of rounds and sums of investment in this field. There were 34 funding rounds that raised $354M during 2017, in comparison to 20 rounds that raised $223M during 2016.

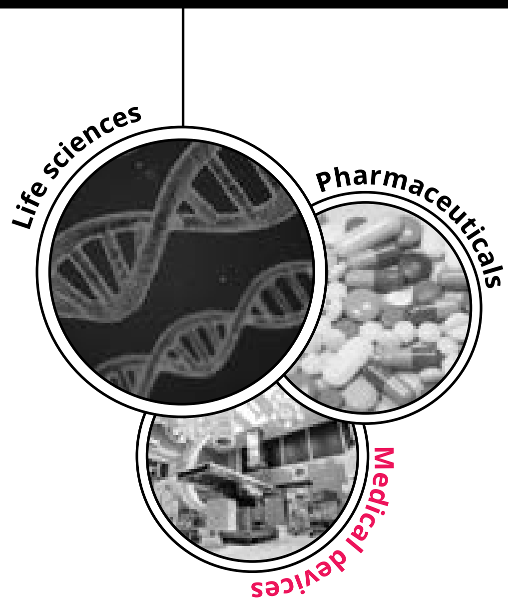
Cnoga Medical, which develops and manufactures noninvasive, pain-free medical devices for personal use and remote medical care, raised $50M from BOE, a Chinese laboratory equipment manufacturer. As part of the deal, the two will offer Cnoga products to the Chinese market and produce new products for the professional health sector as well. Cnoga's vision is to allow every individual to perform needle-free blood tests at home or anywhere else and through one device. The company's products enable the measurement of health parameters by means of an optical diagnosis based on a change in the colors of the finger's color (including pulse rate, blood pressure, cardiac output, oxygen saturation, hemoglobin levels and pH). In the end, all data and indices collected are concentrated in the cloud so that they can be managed and monitored continuously.

Mazor Robotics, a leading innovator in spine surgery, raised a post-IPO equity round from Medtronic of $40M. Mazor Core technology boasts a five-fold reduction in surgical complications and a seven-fold reduction in revision surgeries, compared to free hand-based minimally invasive lumbar fusion surgeries. The company also signed a strategic cooperation with Medtronic, giving Medtronic control of Mazor's spinal surgery systems distribution in the U.S. Its share price soared by almost 400 percent. However, in December, it was reported that the company is being questioned by the Israel Securities Authority regarding suspicions of insider trading relating to the Mazor-Medtronic deal.

In contrast to 2016, when we saw five M&As in the field, only two acquisitions of undisclosed sums were observed this year. It may be because Israeli companies in this particular field are interested in growing and developing into international giants. **Caesarea Medical Electronics (CME)** was acquired by Becton Dickinson and Company for an undisclosed sum. The company is a manufacturer of infusion and syringe pump systems, complementary accessories and a wide range of disposable administration sets. **Lithotech Medical** was acquired by Vention Medical. Lithotech develops an invasive medical device based on an alloy called NiTi made up of nickel and titanium. Its current focus is in the field of urology, in which it offers a solution based on a kind of baskets designed to extract and crush stones from the urinary tract.

Leading investors

Peregrine Ventures and Pontifax were again on the top of the board. It's a comeback for the first two but a new accomplishment for Pontifax. OurCrowd and Rimonci complete the list. Peregrine Ventures is a VC that invests

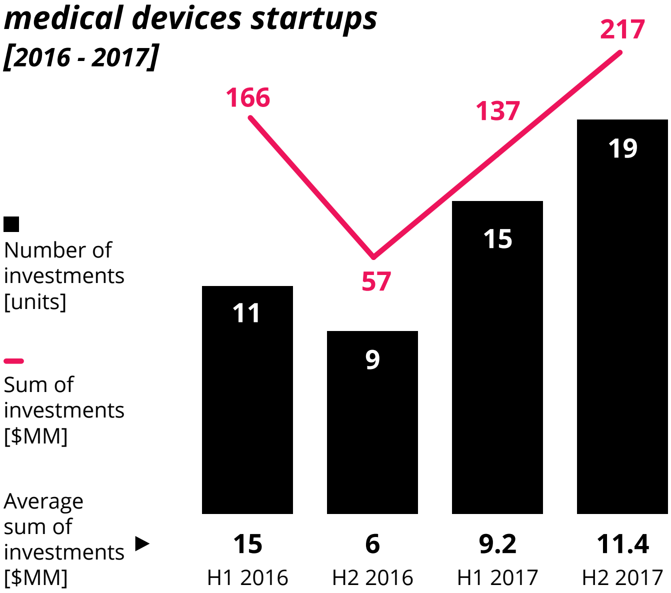


in promising early stage high-tech companies with a strong emphasis on life sciences, digital health and information technology. They invested in several medical device startups this year including CartiHeal, which raised a $18.3M F Round. CartiHeal develops technology in the field of cartilage regeneration. Its flagship Agili-C implant has been shown to promote regeneration of true hyaline cartilage and its subchondral bone simultaneously and without the use of cells, growth factors or other exogenous agents.

Leading investors in the medical devices sector

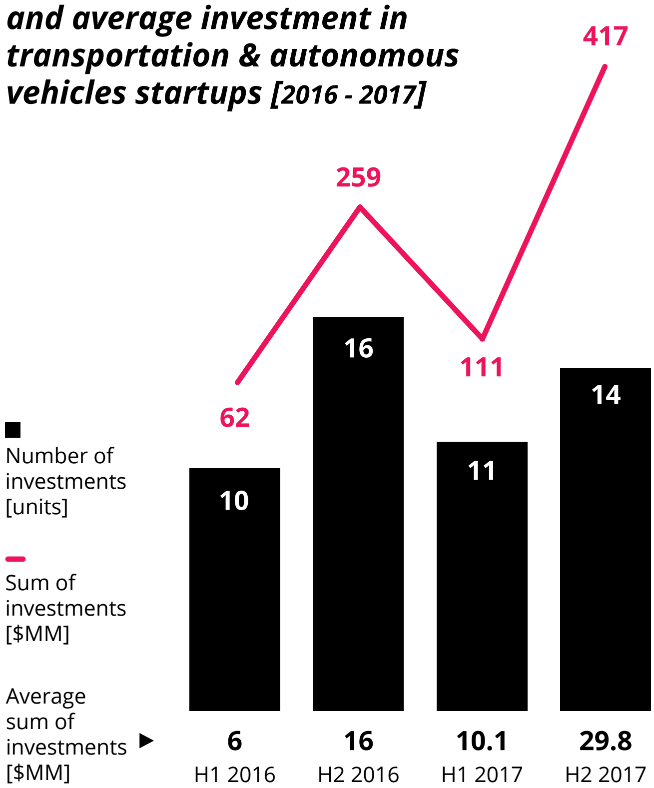
2016	2017
Peregrine Ventures	Peregrine Ventures
GlenRock Israel	TriVentures
Pontifax	Pontifax
Johnson & Johnson Innovation	OurCrowd
BRM Group	Rimonci Capital

Number, sum of investments and average investment in medical devices startups [2016 - 2017]



Transportation and autonomous vehicles

Number, sum of investments and average investment in transportation & autonomous vehicles startups [2016 - 2017]



Investment in the transportation sector has risen to new heights this year as the dream of autonomous cars seems closer than ever. Over $1B has been invested in transportation startups that deal with diverse issues such as ADAS systems and autonomous driving, accurate sensors, mapping, AI and more. These startups are trying to lead the world toward a vision in which vehicles will be connected, shared and autonomous. Accordingly, we see a continued decline in ownership of private cars, and this trend will only continue to grow. In fact, the traditional model of "Transport as an Asset," which puts ownership of a vehicle as a status symbol and as a fundamental tool for independence, is being replaced by the "Transportation as a Service" model (TaaS).

It makes a lot of sense: People spend an average of an hour or two in their vehicles on the road and the rest of the time, the car is waiting uselessly parked. In the future, people will reach their destination by using autonomous ride-sharing fleets offered by companies such as Uber and Gett. When they get there, the car will simply go and pick up the next passenger.

Thus, there is no need to deal with the purchase and sale of cars, ongoing car maintenance, car insurance, fueling, cleaning and the like. On the one hand, this will be a severe blow to the livelihood of many professionals (taxi drivers, parking owners, etc.), but it will open up new business opportunities. For example, this will significantly increase the amount of time people can consume media such as movies or games, where location-based advertising can be combined.

The fierce competition in the field between technology giants only adds fuel to the fire. Car manufacturers, OEMs, car component manufacturers, technology giants and startups are competing over who will dominate this market and lead it and new players keep joining it each day, shifting the balance.

Israel

Israel is a driving force (no pun intended) in transportation, ride-sharing and autonomous car innovation. The monumental acquisition of Mobileye by Intel and global, massive investment in Israeli transportation startups are proof of this. And let us not forget the well known acquisition of Waze by Google in 2013.

Prominent investment rounds and M&As

Israeli startups in the field raised $528M in 25 rounds during 2017, in comparison to $321M raised in 26 rounds during 2016. This represents a stagnation in the number of rounds but a 64% rise in the sum raised.

Ride-sharing startup **Via** announced a strategic cooperation with German car giant Daimler, which included a $250M investment. The companies also launched a joint venture to operate a dynamic transportation service in London. Via developed a technology that allows passengers to get from point A to point B in the city in a relatively fast and cost effective way. Via is a web and mobile app designed to make life easier for transportation managers by optimizing vehicle utilization, enhancing customer service, simplifying driver workflow and improving cost control. Via's technology allows passengers to conveniently share their ride, providing on-demand transportation on a mass scale. When users request a ride, Via's powerful algorithm matches them with cars going their way. Via makes sharing a car with other passengers a seamless experience that is nearly as fast as taking a taxi.

Via recently announced a new partnership with the Berlin Public Transport Authority, the BVG. The new service will be based on Via's artificial intelligence operating system, which will allow commercial Mercedes cars to travel around the city in a smarter and more economical way. Passengers will be able to book a trip through a dedicated BVG application and share the trip with other passengers in order to reduce costs (and lower environmental damage). The service will be launched in Berlin in the spring of 2018, in accordance with the final approval of the regulator.

Innoviz Technologies, which provides LiDAR remote-sensing solutions for fully autonomous vehicles, raised a $73M Series B from investors such as Delphi, Magna, Samsung Catalyst Fund and SoftBank Ventures Korea. The company's flagship high-definition solid state LiDAR, InnovizOne, enables smart, advanced 3D sensing. Innoviz also provides computer vision solutions, including object detection, tracking and classification as well as accurate mapping and localization.

Another company that offers solid-state vision solutions for autonomous vehicles, Oryx Vision, raised a $50M Series B round from Bessemer Venture Partners, Maniv Mobility, Third Point Ventures and others. Oryx's depth sensor can detect tiny objects up to 150 meters away. In addition, it functions just as well in darkness as in light, isn't blinded by the sun and functions even in extreme weather conditions.

In March, Intel, the world's largest chip maker, acquired **Mobileye**, a developer of autonomous driving systems, for a legendary sum of more than $15B. Mobileye holds a development center, the largest computer vision development center in the world, in Jerusalem. The company employs more than 300 research and development personnel, who are expected to join more than 10,000 Intel employees at its various development centers in Israel. However, Intel stressed in its announcement that all development activities for autonomous cars will be carried out in Jerusalem. While Mobileye will no longer be an Israeli company, Israel will still play a significant role in Intel's strategy and in the autonomous car domain.

This historic purchase came a few months after Intel, Mobileye and German automaker BMW announced a unique collaboration. They plan to develop an autonomous driving system with varying levels of control and human intervention, and with advanced machine learning capabilities. The partnership between the three companies reflects BMW's expertise in vehicle manufacturing, Intel's chip and camera development capabilities and Mobileye's computerized vision algorithms, machine learning and autonomous driving prowess. The companies declared that their autonomous vehicle would reach the roads in 2021. It is important to note that we (Geektime) won't be including Mobileye's acquisition as part of our M&As tally. In 2014, Mobileye launched its IPO on the NYSE, which was the biggest Israeli IPO ever in the U.S. at the time. It raised approximately $1B at a market cap of $5.3B. This means the current acquisition is a secondary acquisition. However, this buyout is still significant for the Israeli ecosystem.

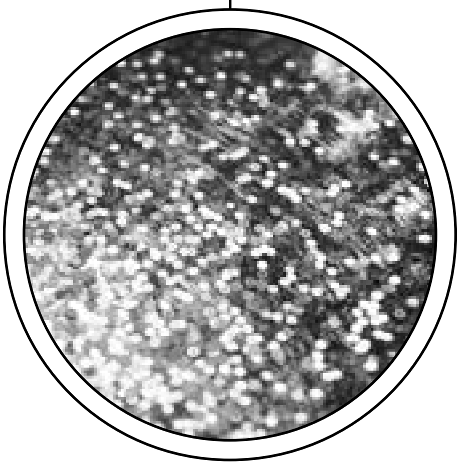
One of the major impacts this exit will have on the local ecosystem is the creation of more technological positions. In May, Mobileye announced that it would expand their Jerusalem offices by building a huge campus in the Har Hotzvim industrial zone. Once the campus is built, the company aims to increase its workforce to 4,000 employees. Currently it employs 660. There were other big M&As in the field this year, like that of Argus Cyber Security by Continental for $450M, on which we have already discussed.

Leading investors

The leading investors in this category were Maniv Mobility, Vertex Ventures, Zohar Zisapel, Magma Venture Partners and OurCrowd. Maniv Mobility is a venture capital firm that focuses on investing in transportation technology, including safety, business model innovation and autonomous vehicles. Maniv made eight investments in this domain, including in Oryx Vision, Cognata, Upstream Security (two rounds), Aurora Labs, Guardian Optical Technologies and Otonomo.

Leading investors in the autonomous vehicles sector

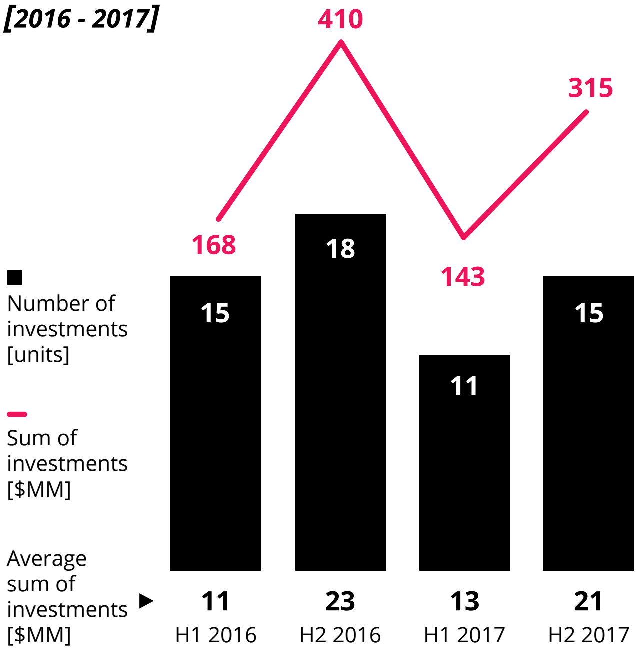
2016	2017
Volkswagen Group	Maniv Mobility
Expansion Venture Capital	Vertex Ventures
Hearst Ventures	Zohar Zisapel
Pitango Venture	Magma Venture Partners
83North	OurCrowd



Fintech

The technological revolution is making its way towards the financial industry in general and banks in particular. This sector is going to change dramatically over the next 10 years following the entry of more than 5,000 innovative startups seeking to create a revolution. The number of dollars invested in the field in 2017 showed a significant growth trend, similar to the past few years. Fintech unicorns continue to proliferate and so do mega-rounds, each of which exceeds $100M. Loans, investment management and savings, payments and money transfers, P2P loans, payments and clearing, capital markets, insurtech, equity crowdfunding and of course blockchain and cryptocurrencies are the main areas in which fintech startups are engaged.

Number, sum of investments and average investment in fintech startups
[2016 - 2017]



There are hundreds of fintech startups that concentrate all their energies and resources on creating alternatives to traditional banking. At first banks ignored the world of fintech, but in recent years, after seeing how it was gaining momentum, they have changed their approach. Unlike other sectors such as the tourism industry, where travel agents have disappeared from the world and been replaced by price aggregation sites and recommendations, the pace of disruption in the banking world is slower since regulators closely monitor it. This allows banks to try to catch up with the pace of innovation by collaborating with startups.

Another strong fintech segment that has already earned headlines and success is insurtech, which is also trying to cut the middleman out of the process. The insurance industry has remained unchanged for many years. Surveys show that insurance services are the financial field in which there is the most consumer dissatisfaction, compared to areas such as banking. Insurtech startups appeal to two types of customers: they can offer digital insurance services to consumers or offer technological solutions to improve the internal and external processes of insurance companies.

While this market is growing and contains many opportunities, entrepreneurs seeking to enter it face significant obstacles, including regulatory restrictions, distrust of consumers and insurance companies, and investors' fears of entering a lesser-known area. Nevertheless, in recent years more and more investments and M&As have been registered in this segment, and there is an increasing number of partnerships between technology giants, venture capital funds and insurance companies and startups.

Israel

Israeli fintech startups raised $458M in 26 rounds during 2017, in comparison to $578M raised in 33 rounds during 2016. This marks a small decline in the number of rounds but also a 21% drop in the sum of money raised. While fintech VC investments declined in both the number and sum of money raised in 2017, this sector still boomed since there were quite a few ICOs in the blockchain and financial fields. We will elaborate on this later in the report.

Prominent investment rounds and M&As

BlueVine managed to raise two separate debt-financing rounds in 2017 with a total value of $205M from Fortress Investment Group, Silicon Valley Bank, Bank Leumi, TriplePoint Venture Growth and SunTrust. BlueVine is an online invoice factoring company that helps small businesses overcome their short-term cash flow challenges. BlueVine bridges the cash gap that results from slow-paying customers by enabling businesses to sell their unpaid invoices so there is no need to wait for net 30 or 60 payments.

Lemonade raised a $120M Series C round led by Japan's SoftBank, which was joined by existing investors including the XL Innovate fund of XL Insurance, Thrive Capital, General Catalyst Fund, Allianz Ventures, the investment arm of the insurance giant, and GV, Google's investment fund. Following the round, Lemonade's valuation is estimated at half a billion dollars.

Lemonade is a licensed insurance carrier that offers homeowners' and renters' insurance through digital means powered by artificial intelligence and behavioral economics. By replacing brokers and bureaucracy with bots and machine learning, Lemonade promises zero paperwork and instant policy purchases. The company's activity model is P2P insurance, that is, member-to-peer insurance, a new operating model with a number of unique features, including a fixed percentage of revenues it retains; As a result, the company's profitability will not improve if it rejects the claims of its policyholders. The company also promises to return the community funds remaining in its coffers in 'good' years and to contribute them to the purposes chosen by its policyholders.

Another company that raked in a nice $35M sum is Next Insurance, which is not surprisingly operating in the insurtech arena. Next Insurance aims to change the insurance industry for small businesses by integrating an online system that will enable them to purchase insurance tailored to their specific business activities. Next Insurance's model will enable SMB owners to buy the ideal business insurance for them online and within a few minutes, according to the data that the business owner provides. The platform collocates coverage plans, enabling a greater degree of customization of the final package.

Another meaningful event in this sector was the establishment of a new fund dedicated entirely to fintech: Viola Fintech, which is part of The Viola Investment Group. The new fund has completed a $100M round, with its main investors being Scotiabank (the third largest bank in Canada), the American insurance corporation The Travelers Companies Inc. and Israeli financial corporations including Bank Hapoalim, Meitav Dash, Discount Bank Direct Insurance Group and Direct Financing. The main feature of the Viola Fintech fund is that its activity is based on cooperation between financial corporations and fintech companies in various stages of growth in Israel and abroad, in which the fund will invest. This cooperation gives the fund a double advantage: both in identifying solutions to the problems faced by these corporations in the financial environment, and in exposing these startups to corporations in a manner that may accelerate their growth.

On the M&As front, this was not such a glorious year for the fintech industry. Two companies were acquired for unknown sums. Finupp was acquired by iGroup. Finupp is an online tool that helps Israeli taxpayers check their entitlement to tax refunds and claim their refunds quickly and easily. The cloud-based web interface relies on an algorithm that calculates tax rights and thus saves the need to rely on someone who will do it manually and expensively.

Binary option trade company AnyOption decided to close its sales centers in Israel and lay off all its employees. It was later acquired by Invest.com, which will merge its principal assets and operations into itself. Invest.com will receive an active customer portfolio from the transaction, existing regulatory and licensing systems in Europe and other territories worldwide, skilled personnel in the field of marketing and technological infrastructure, which supported the company's activity over the past ten years. Invest.com is expected to leverage these assets to market its financial products to customers worldwide. The acquiring company conditioned the transaction on AnyOption terminating its binary options activity immediately.

Leading investors
The leading investors in this category were Battery Ventures, Viola Ventures, HV Holtzbrinck Ventures, Standard Bank and Clear Future. Battery Ventures is a technology-focused global investment firm that invests in various sectors including application software, IT infrastructure technologies, consumer internet and mobile services, and industrial technologies. Founded in 1983, the firm backs companies at stages ranging from seed to growth and private equity, and invests globally from offices in Boston, Silicon Valley and Israel. In 2017, it made four investments: in hibob, CrediFi and Zeitgold (two rounds).

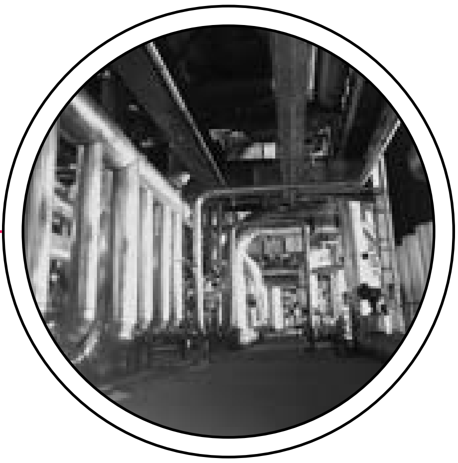
Leading investors in the fintech sector

2016	2017
83North	Battery Ventures
Sequoia Capital	Viola Ventures
Carmel Ventures	HV Holtzbrinck Ventures
Lightspeed Venture Partners	Standard Bank
Susquehana	Clear Future

A note about other sectors

Data analysis
(big data and analytics)

Investment rounds in 2017 showed a 40% increase in the number of investments and a 50% increase in the sum raised. Significant rounds in this sector this year included Cybereason, SentinelOne and AppsFlyer. On the M&As front, there were a few notable deals, including Aditor, Seculert and Abbi.



Industrial technologies

Showed a small 2% increase in the number of investments but a 40% increase in the sum of investments. Even though this indicates a smaller average for each round, it does show a general upward trend. Significant rounds in this sector this year included Ecoppia, Highcon, Augury and Buildup. On the M&As front, there were a few notable deals, including DigiFlex, Dip-Tech, Nurego, Servotronix and Landa Nanometallics.

VR/AR

Showed a 43% increase in the sum raised in 24 funding rounds. Last year, this sector only had four investments. Significant rounds this year included Inception, AugMedics and TechSee.

Drones

Startups had a 70% increase in sums raised and a significantly higher number of investments (18); there were only a few in 2016. Significant rounds this year included Airobotics, Atlas Dynamics and Flytrex.

Storage

Investments showed a staggering 500% growth over 2016 and a few high-volume M&As. Significant rounds this year included INFINIDAT, Kaminario and Excelero. On the M&As front, there were a few notable deals, including SimpliVity and Plexistor.

Sector spotlight: Blockchain

After a year chock full of explosive headlines on blockchain, Bitcoin, token sales and initial coin offerings (ICOs), the public finally woke up to the promise of blockchain technology in 2017.

Today, we cannot imagine our lives without the Internet. But if someone would have described it to us 30 years ago, we probably would not have believed that such a service would exist and change our day-to-day lives. Many understand that the blockchain will be at least as significant as the internet.

From the point of view of the general public, blockchain is associated with cryptocurrencies in general and the Bitcoin currency in particular. Most people don't understand the technology that underlies Bitcoin, but they constantly hear that the value is rising. **Over the past year, we have seen the meteoric rise of the Bitcoin coin, which jumped from $1,000 to $20,000 at the beginning of December.** The rise was mainly due to the introduction of new players into the market: some of them are familiar with the blockchain industry and the inherent risks in it, while others don't have a deep understanding and are simply looking for a way to earn quick and easy money. There is no doubt that the significant increase in the market value of cryptocurrencies has enabled the ICO boom. In recent months, there have been over 170 new ICOs each week. Some of the ICOs offer concrete, solid business ideas and some have just identified the potential for raising funds through ICOs and jumped on the chance to be part of the blockchain hype.

Today, in most countries, appropriate legislation has not yet been formulated for ICOs, since this is not a security (in most cases) and the method of capital raising closest to it is crowdfunding. The difference is that crowdfunding campaigns offer concrete rewards while ICOs promise tokens, which a lot of times don't have an actual use other than trading the tokens. Unfortunately, many startups turn to ICOs even though they don't explain properly why a new token is required and whether it is possible to receive any service in exchange. Oftentimes a token's worth is purely speculative and is based on a supply demand economy and the success of the company behind it since in most cases, the tokens don't provide equity in the company.

The sums raised by ICOs in 2017 exceeded the $4B threshold. This waterfall of money led non-blockchain startups to try their luck in raising capital through ICOs even when their domain was completely irrelevant to blockchain. It seems that only a few (5-7%) of the ICOs are what we would call "true ICOs." What we mean by this is that they have a genuine idea based on blockchain technology, a solid team and a potentially viable business model. The rest lack several of these characteristics and some are outright scams. There are many businesses turning to ICOs to raise profit easily, but are not necessarily "blockchain" startups, nor in many cases, sound investments. So new investors looking to enter this domain should choose their investments in a very precise manner in order to pick the wheat from the hay.

ICOs as a VC funding alternative

Startups have to work very hard to get large sums of money from VC funds. First, they must do their research and locate the most suitable funds for their needs. Next, they need to get the opportunity to meet with these investors in person and deliver their pitches. Once they manage to secure the investment, these investors become part of the company's decision-making board. Startups then are no longer free agents but have to be accountable to outside forces. And of course, they need to give up equity.

So, when early stage startups wish to raise money and have to decide between two paths, VC investment or an ICO, there is no doubt that the option to raise huge sums of money from an ICO — especially when all they have is an idea — is more alluring. For the average Joe, ICOs represent a new way to invest in startups, albeit in relatively small sums. Unlike equity crowdfunding, where you usually have to be an accredited investor, ICOs give people the opportunity to invest any sum of money without the need to prove extensive self-capital. This is an option that did not exist before the crypto world. It is therefore clear why so much money flowed into this investment channel.

The future of futures contracts

The Bitcoin market has recently introduced a new trading option called futures contracts. It allows individuals to bet on Bitcoin fluctuations without purchasing the actual currency, in a manner similar to betting on the future of other valuable products. Futures contracts trading started at the Cboe stock exchange, followed by CME, the world's largest futures and options broker (which is responsible for the Dow Jones Industrial Average). The launch of this new investment option was accompanied by a lot of criticism and concern. Many raised the claim that this only worsens the current blockchain bubble. Now that the spirits have calmed down a bit, it has become clear that the people who are likely to benefit from this option are the Bitcoin miners, since they can hedge themselves by betting on a decline. If the currency does fall, they lose on the entire wage, but benefit from the realization of the contract. Many feared the price fluctuation that the futures market could cause. But since it started, the Bitcoin prices have "stabilized," for the time being.

In general, we are rapidly marching towards a more stable market, with smarter investments as more authoritative and knowledgeable experts offer reviews and analysis of the quality and prospects of ICOs. These experts will become the unofficial underwriters of the crypto world. In the coming year, we will see more regulators making decisions about the status of cryptocurrencies and whether they should be treated as an asset or a currency, with all the resulting tax implications.

Israeli ICOs

There have been 17 ICOs by Israeli companies that raised a total of $490M. Even though some companies raised relatively small sums of money in their ICOs, they are now traded at a much higher price. For instance, **Jelurida's Nxt** ICO was modest, starting at $15M. But now, it has more than $65M.

Sirin Labs, the developer of the $14,000 ultra-secure mobile phone SOLARIN, has pivoted to the mass market and is heading towards the development of the first open source blockchain smartphone: It will be called FINNEY. With an impressive campaign and Lionel Messi as their key spokesperson, they recently raised a whopping $157M in their ICO.

Bancor has developed its own unique protocol that makes it easy to create, trade and convert cryptographic coins into all kinds of currencies. The company raised $153M worth of ether in three hours on June 12. Bancor was also the "best public blockchain" solution out of the eight competing companies in CoinAgenda, a prominent conference for digital currency investors that took place in March.

Stox, which provides financial data to consumers, public companies and brokers, raised an amount equal to $34M in an ICO in August. Jelurida has conducted two ICOs for a few connected technologies called Nxt and Ardor (which is still ongoing). Nxt is an advanced open-source application platform that expands the things you can do with a blockchain. Ardor is an evolution of the Nxt software that addresses issues of blockchain bloat, scalability and versatility. The Ardor token called IGNIS has raised $9M.

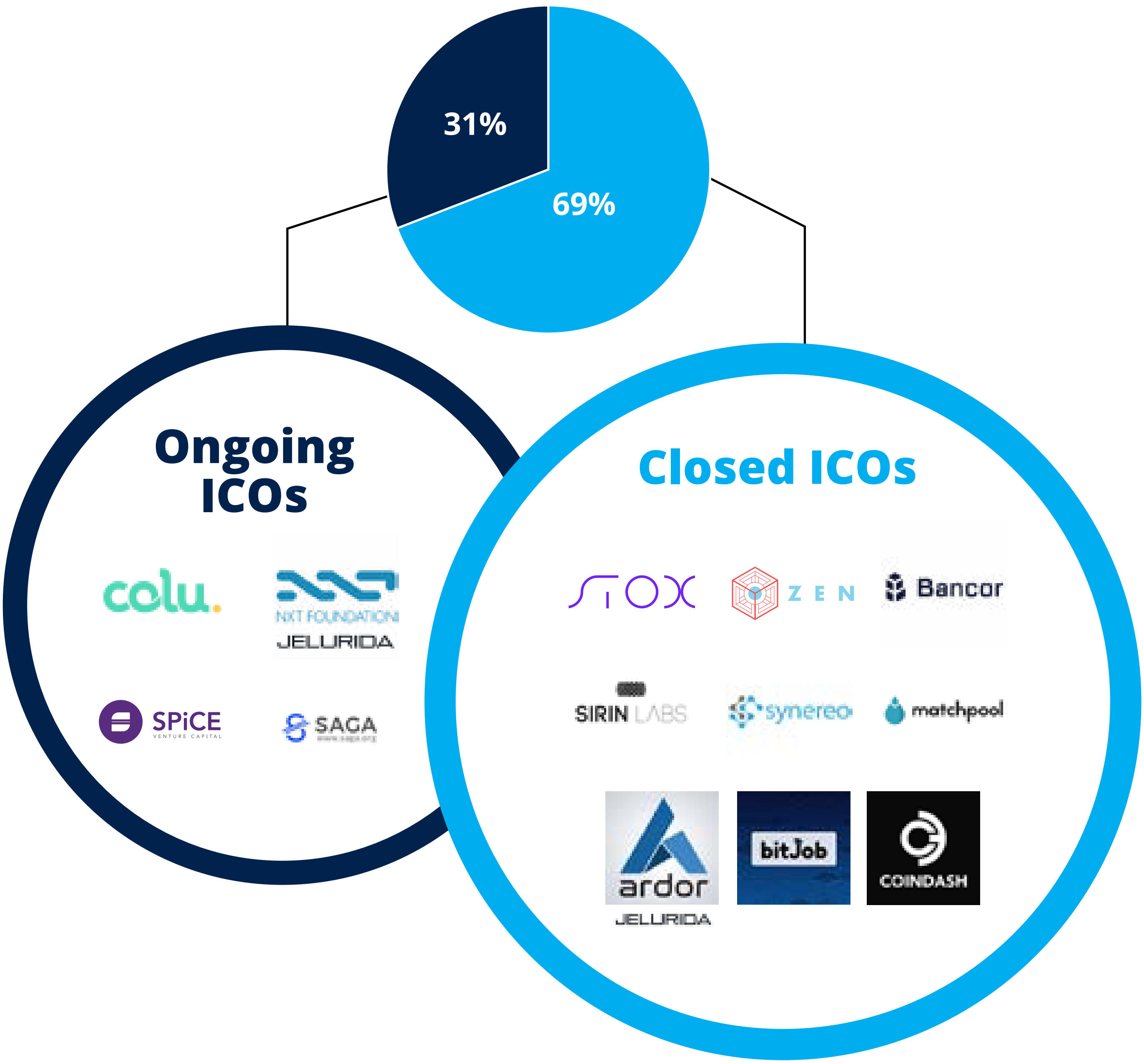
Coindash raised $7.7M in an ICO before suffering from a devastating cyber attack. The company developed an operating system for cryptocurrency investors. The Coindash platform will enable cryptocurrency investors to manage and analyze their portfolios, share insights about the market and display achievements, as well as copy-trade and receive trading signals. Coindash can also further monetize their expertise, helping them get more influence by being followed by other investors and become superstars in their community (similar to platforms like YouTube). For amateur and beginning investors, CoinDash can be their entry ticket to the crypto space: They can follow the best in the business, get incredibly fast live trading signals, copytrade others and sharpen their trading skills.

Matchpool is a decentralized matchmaking protocol that uses group dynamics to help participants match with each other. It raised $5.7M in its April ICO. **Synereo**

is developing a decentralized, blockchain-enabled computation platform for applications. The platform includes its decentralized social network, owned and controlled by users. It raised $4.7M in October 2016. **Zen Protocol** is a platform designed to make moving Bitcoin and other assets with smart contracts easier, more efficient and friendlier to newcomers. It raised more than $50M.

There are four ongoing ICOs by Israeli companies: **SPiCE VC**, a liquid VC fund that will use the **Bancor** protocol to offer immediate liquidity to investors; **Colu**, a decentralized payment system for local communities that has operated since 2014. They have already secured a purchase of $14.5M worth of tokens from the IDB Group; and **Saga,** a promising company still in stealth-mode.

Israeli ICOs by stages
[from all years]



Israeli blockchain startups by segmentation

88 startups total

13%
Technological infrasructure & protocols [11]

3%
Hardware & mining [3]

21%
Social & media [19]

39%
Financial services
[35]

CEDEX
BitMint
Bitrated
Celsius
Cointelligence
Bits of Gold
CoinDash
PayKey
Coinmama
colu
SafeBeyond
coti
Crypto Next
TokFi
Credium
Jelurida
SAGA
Homelend
simplex
Solar Change
KIN
STOX
zerobillbank
ZotaPay
GAP600
Wemark
Mazalit
white stream
SandBX
Millentrix
Bit2C
Spheris
PayPerEx
Carats.io

22%
Enterprise & cloud
[20]

DAV
ChromaWay
LogicalForm
MaterialsZone
Revelator
Greeneum
DNA.Bits
MultiChain
Halo Digital
Proof Work
Wave
NS
Chainmails
Wings
Cryptonomica
BriefTrace
Solar DAO
Connobium

What can we expect in 2018?

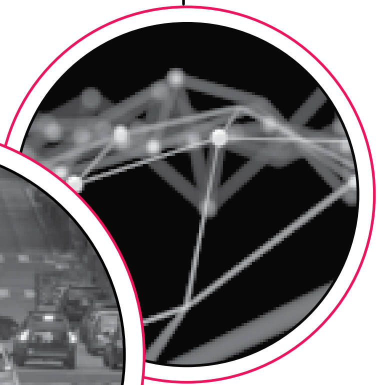
1. Improved AI

In 2017, artificial Intelligence, machine learning and deep learning continued to become more significant and essential parts of the startup world. **We expect that many more creative AI solutions and innovative ways to solve complex business problems will come to light in 2018.**

A trend that should develop further in 2018 is AI applications for enterprises. We may not all lose our jobs and be replaced by robots, but more tasks that were once done manually and by humans will be transformed to AI-driven solutions. From AI-based CV crawlers that know how to identify relevant CVs to analysis and forecasts tools aimed to decide what should be the company's next strategic acquisition, various tools will save organizations time and increase efficiency. The reason for this change is the improvement in this technology that now enables organizations to trust these solutions.

2. Sophisticated IoT solutions

The Internet of Things (IoT) has been growing for several years. **And it seems that in order to produce smarter solutions, society and developers need to start creating products with IoT connectivity and applications in mind.** Efficiency, convenience and integration in everyday lives will be the key to adoption. But here's where AI technologies come to the rescue: AI can help IoT devices better sync with human communication and needs. Using AI's abilities to collect data from different devices, AI technologies will be able to optimize and automate systems, which will lead to less human error. As businesses adjust to the evolving digital age, companies will seek innovative ways to deliver their products and services, with IoT in mind.



3. Autonomous, connected, shared cars

What a decade ago was only a dream that started to take shape, might become a reality this year. First, Google is going to launch a fleet of taxis based on the autonomous car they created called Waymo in a suburb in Phoenix, Arizona, USA. This is one step towards legislating other laws in other states in the U.S. – all around using autonomous cars.

In addition, with companies like Ford that joins and develops sensors and hardware related to autonomous cars, we might get a chance to see more and more autonomous cars being used. In the beginning, they will probably be used as a shared service (such as taxis) in different areas in the U.S. and in the future, they will expand to other areas.

4. A blockchain-dominated world

In the beginning of the year, the global cryptocurrency market size was $17M. Toward the end of 2017, it neared $630M. This is an impressive, nearly 40-fold jump. In the coming year, new players, including financial and institutional organizations, will join the crypto world. **The market is expected to reach a staggering $3T.**

After the ICO fever that swept the world this year, we have seen a decrease in the number of ICOs that have reached their desired soft cap (the minimum raising cap). This caused a number of ICOs to rethink their future steps in the field. This downward trend will continue into 2018, both due to the fact that the general public won't be as eager to invest in just any new cryptocurrency and regulation.

2018 will be marked by cryptocurrency forks following the recent success of Bitcoin Gold, which managed to earn its founders a nice $40M bounty. The desire for easy bucks will attract better and worse forks. In both cases, we expect a lot of other Bitcoin derivatives in our wallets over the coming year.

Similar to the entry of derivatives exchanges to the future contract arena and the thoughts that certain countries (such as Israel) have on setting up their own cryptocurrencies, we will see more financial organizations adopting digital asset technologies for different purposes, whether it is banks experimenting with the adoption of blockchain technology or real estate agents looking for new ways to sell properties.

Until next time,

Geektime

Business Intelligence unit

Intelligence.geektime.com

data@geektime.com

+972-77-2014590

For more
about
blockchain

CRYPTO TREE
by Geektime
crypto.geektime.co.il