# ISRAEL HIGH-TECH & INVESTMENT REPORT

A MONTHLY REPORT COVERING NEWS AND INVESTMENT OPPORTUNITIES JOSEPH MORGENSTERN, PUBLISHER June 2018 Vol. XXXIII Issue No.6 You are invited to visit us at our website: http://ishitech.co.il

# Raising Funds & Investing

#### Entree Capital closes \$80m second Israel Venture Capital fund

The fund will target early-stage companies in deep technology, AI, AR/VR, SaaS, Fintech and 'loss of friction' opportunities.

International venture capital firm Entree Capital, today announced the closing of its second Israeli focused early stage fund with aggregate capital commitments of \$80m.

The fund follows on from the success of Entrée's previous Israeli fund that invested at the early-stage in Israeli startups such as monday.com, Riskified, DragonPlay (exited to Bally/Scientific Games), HouseParty, Breezometer and KitLocate (exited to Yandex).

Entrée Capital founder and managing partner Aviad Eyal said, "Our approach has always been 'For Founders. By Founders'. We established Entrée to be the go-to place for founders that form great teams solving big problems. We partner with founders for the long term, by providing full and fair funding rounds so founders have the time to develop their ideas into successful companies."

Michael Kim, the founder of Cendana Capital, the leading institutional LP that invests in Seed VCs, added "We are very excited to partner with Entrée Capital, who we believe is the vanguard of Israeli Venture 2.0. Their founder-friendly approach will help transform Israeli venture capital and align both founder and

investor incentives to generate success."

Entrée also announced the addition of two new partners to the new fund. Ran Achituv joins as a managing partner, having previously been a partner at another venture capital firm, and prior to that serving as CTO of Amdocs (Nasdaq) and Verint (Nasdaq). He also cofounded several startups, and recently his



#### In this issue

- Entree Capital closes \$80m second Israel VC fund
- Vector Capital Invests \$50m in Israeli cybersecurity co KELA
  - Israel defense exports soared 40% in 2017
  - Mobileye to supply systems for 8m cars to European co
  - Israeli co V-Wave raises \$70m for heart failure device trial
    - Philips buys Israeli cardiac imaging co EPD for \$292m
      - Clal Biotech co Neon Therapeutics to raise \$115m
      - Outbrain buys Israeli UI optimization co AdNgin
    - Credit Suisse to raise \$250m for Nacht's aMoon Fund
      - Israeli startups raised nearly \$400m in April

portfolio company, Argus Cyber, exited to Continental AG for over \$400 million. Eran Bielski, who worked at Entrée Capital for over three years, has been promoted to general partner. Eran previously worked at JPMorgan Chase, led a number of Entrée investments over the past years, and overseas SigmaLabs, Entrée's accelerator based in Tel Aviv.

The new fund will target early-stage companies with Israeli founders both in Israel and abroad, in the fields of deep technology, AI, AR/VR, SaaS, Fintech and 'loss of friction' opportunities.

# Vector Capital invests \$50m in Israeli cybersecurity co KELA

Tel Aviv based KELA provides advanced cyber intelligence software and solutions to enterprises and governmental agencies around the world.

Israel-based provider of advanced cyber intelligence software and solutions KELA Group, today announced a \$50 million equity investment from San Francisco-based Vector Capital. Vector's minority investment is the first institutional funding received by KELA since its establishment in 2009.

The Tel Aviv based company was founded by CEO Nir Barak, Yigal Naveh and Eran Shtauber, Israeli intelligence veterans from Unit 8200 and its associated R&D units, KELA provides advanced cyber intelligence software and solutions to enterprises and governmental agencies around the world. Its security platform, RaDark, leverages advanced algorithms, data science, and elite Israeli intelligence expertise to provide extremely targeted and automated darknet monitoring and cybersecurity solutions that protect large enterprises and governments around the world. The automated platform provides real-time actionable intelligence about threats specifically

targeting the client's organization, such as leaked user credentials or IT infrastructure vulnerabilities, allowing organizations to thwart attacks before they take place.

Barak said, "We are proud of the technology, solutions, and especially the talented team we've built over the past 9 years. Our targeted intelligence technology creates a rapid and measurable improvement of our customer's IT security - leading to, in some cases, reductions of over 80% in fraud-related revenue losses driven by our platform. We look forward to working with Vector's team and to helping protect more clients around the world from cyber threats with our unique capabilities."

KELA's solutions are utilized by the world's leading financial, retail, energy, manufacturing, telecommunications, automotive, consumer, and internet brands, as well as governmental agencies, across the U.S., Canada, Europe, Asia, and the Middle East.

Vector Capital managing director Matt Blodgett

# Israel High-Tech & Investment Report

Published monthly since January 1985

#### Publisher and Editor in Chief Joseph Morgenstern, B.A. Chem.

# Technology Review Board

Prof. S.J. Joel-Cohen, MD, FRCS. FRCOG (1996-2002) Prof. Hylton Miller, M.B. Ch.B.

# Copy Chief

Debbie Mor

Web Master

Marty vonBokel

**Graphics Consultant** 

Daniel Morgenstern

#### Subscription Inquiries

E-mail: httr\_1@netvision.net.il

Annual subscription \$95.- per year, for 12 issues,
Israeli residents add 17% VAT

Web Edition and Achives http://ishitech.co.il

said, "We see tremendous potential for enterprise and government security and fraud prevention teams to utilize KELA's unique software and intelligence expertise to better identify and protect themselves from cyber threats, and look forward to introducing the company's specialized products to customers and partners across North America."

#### Israel defense exports soared 40% in 2017

The Defense Ministry reported that sales in Asia boosted defense exports to an all-time high \$9.2 billion.

Israel's defense exports zoomed 40% to an all-time high of \$9.2 billion in 2017, according to figures published today by SIBAT - The Foreign Defense Assistance and Defense Export Organization in the Ministry of Defense.

The dramatic rise in defense exports is attributable to a series of huge deals last year by Israel Aerospace Industries Ltd.
(IAI) (TASE: ARSP.B1) in India, headed by the \$2.5 billion deal to supply Barak 8 missile defense systems. These deals took many years of preparation and joint development with the Indian defense authorities. At the same time, the Ministry of Defense said today that in addition to this huge deal, other substantial defense deals also contributed to the steep rise in defense exports in 2017, and this trend is projected to continue in 2018.

IAI is currently showing obvious satisfaction with Israel's export results, a large proportion of which resulted from deals led by the company last year. IAI CEO Joseph Weiss told "Globes," "We're working on a lot of deals, some of them with a substantial volume, and I assume that some of them will materialize this year. The forecast for 2018 appears quite positive. He explained, "The effect of success in the Barak 8 missiles deals in India will continue for a few years, and will also be reflected in the company's profit margins."

The Ministry of Defense's figures indicate that the bulk of defense exports, 80%. consists of missile and air defense systems, followed by deals involving exports of radar and electronic warfare systems and upgrading of weapons platforms and avionics.

Most of the major deals were by the four main defense companies: IAI, Rafael Advanced Defense Systems Ltd., IMI Systems Ltd. (IMI), and Elbit Systems Ltd.

(Nasdaq: ESLT; TASE: ESLT). Elbit Systems, the only one of the four that is not a government company, is in advanced proceedings to acquire IMI from the state. Defense companies employ 150,000 workers in Israel.

# NATO countries are in a military buildup

SIBAT head Brig. Gen. (res.) Michel Ben-Baruch attributed the increase in exports by defense companies to a rise in defense spending by NATO members, with an emphasis on procurement of home front defense and border protection systems as a result of the waves of immigration in recent years and the challenge posed to defense agencies by the growing terrorist threats.

Over 20% of Israel's defense exports last year went to European countries, but a large majority went to Asia, the main target market for Israeli defense companies. "Asia is a target for all the defense companies in the world. Although there is intense competition against major powers, Israel enjoys a great deal of prestige because of the quality of its products and the reputation of its industries. This enables us to complete in those markets against large global companies," Ben-Baruch told "Globes."

In addition to IAI's large-scale missile deals in India, another prominent defense deal in recent months led by the Ministry of Defense involving Elbit Systems and IAI was with Croatia.

Israel will sell Croatia 12 outdated F-16s upgraded by IAI and Elbit Systems in a deal estimated at \$500 million.

The F-16s that Israel is selling in the deal were grounded in recent years as part of an internal IDF streamlining measure, due to their age and high maintenance costs. Ben-Baruch said, "In this deal, we went up against huge European companies and triumphed in the competition within Europe. That wasn't easy. The deal was important, because it paves the way to future investments and cooperative efforts between the two countries, including in non-military areas."

The Ministry of Defense's figures show that only 2% of all exports by defense companies last year consisted of unmanned aerial vehicles (UAVs), even though this sector has been associated with IAI and Elbit Systems for many years.

Defense sources pointed out that other players from around the globe have entered the UAV market in recent years, including Chinese companies offering substantially cheaper products than those offered by Israel. These companies are aiming mainly at developing countries.

In addition to the intensified competition in strategic UAVs between Israeli and US companies, especially during the past year, which was reflected in the UAV tender in Germany, a similar tender in Australia, and recently also in Belgium. "Israel was a pioneer in this for many years. The world is changing and developing, there is competition in this area, and we're coping with it fairly well," Ben-Baruch said.

US company General Atomics has clearly been motivated in recent months to expand its marketing of aircraft in markets where Israeli companies have hitherto enjoyed a significant advantage, following removal of former

President Obama's restrictions on US exports of certain types of UAVs. These restrictions were reconsidered by current US President Donald Trump, who decided to remove them. "There is no doubt that we're up against very tough competition that is becoming more and more difficult every year, a defense source said.

Commenting on global competition in the UAV market, Weiss said, "We introduced the first UAV to the world 30 years ago. Strong competition has since emerged, both in Israel and abroad. It's not easy, but we still have good reasons to believe that next year and in the subsequent years, deals in this sector will improve."

#### Huge deal in India still stalled

The Ministry of Defense agrees with Weiss that additional important deals will go through in the coming year, with export figures in 2018 being similar to those in 2017.

Due to the nature of these deals, concluding them sometimes takes many years. One such deal is Rafael's Spike missile deal, which is projected to amount to \$500 million. This deal has seen ups and downs; its implementation has already been delayed for a long time by internal disputes in India between research and development agencies and the Indian army.

In addition to Rafael's stalled missile deal, delays were recently reported in a large radar deal by IAI subsidiary Elta Systems, in which the company is to supply the Czech army with advanced radar systems. The reason for the delay is the difficult in connecting the Israeli radar to NATO systems.

Despite the impressive increase in Israeli defense exports in 2017, the Ministry of Defense is describing the coming years as "challenging" for Israeli companies, due to the

increasing number of competitors in the market; demands by customers for production of products in their territory, including the transfer of technologies and know-how; and the US military aid agreement, which includes the elimination of Israel's current option of converting a quarter of US aid from dollars to shekels, starting several years from now. Cancelation of the dollar-shekel conversion clause will have a significant effect on the Ministry of Defense's ability to direct procurement budgets to Israeli industries, because all US military aid money will have to be spent on procurement from US companies.

In preparation for the new situation dictated by the US aid agreement, more and more Israeli companies have already begun establishing activity in the US, concluding cooperation agreements with local companies, or founding US subsidiaries. IAI is currently searching for a VP to manage its US business, so that future procurement by Israel based on US aid money will be made from IAI subsidiaries incorporated in the US, among other things.

Ben-Baruch says that in view of the growing trend towards moving production to other countries and transferring know-how and technology, in addition to the sale of these systems to third parties, the Ministry of Defense has established a control mechanism to ensure that products originating in Israeli know-how do not leak to hostile countries, including insistence on a tough system of confidentiality and usage restriction agreements. At the same time, although these restrictions are designed to safeguard the state's security interests and those of Israeli companies, which are expanding their global sales, the Israeli economy is liable to lose jobs in Israel. In the past, defense sources explained that in view of the trend that began in India with the "make in India" policy declared by Indian Prime Minister Narendra Modi, which is spreading around the world, companies wishing to survive have no choice

other than to comply with this trend.

The Ministry of Finance emphasized that in general, it takes care to maintain the IDF's qualitative and technological advantage, while preserving unique know-how and advanced versions of systems. "We're not selling everything. Every important deal is discussed thoroughly in serious forums in the Ministry of Defense in which levels of secrecy are set for every product, and the likelihood that knowhow will leak to other countries is also taken into consideration," Ben-Baruch declared. At the same time, Ben-Baruch addressed allegations that Israeli weapons reaching countries that violate human rights, saying "We are careful to maintain human rights. operate in full coordination with the Ministry of Foreign Affairs, and consider all aspects, while employing supervision and enforcement systems."

The Ministry of Defense did not comment today on affairs featuring Israel defense companies that made negative headlines in recent months, including the Aeronautics affair, in which a court has imposed a gag order.

Commenting today on the defense export figures, Minister of Defense Avigdor Liberman said, "In two years, we have increased defense exports substantially. This is a superb achievement by any standard, which is attributable to hard work by SIBAT and the defense industries, as well as a series of agreements with countries having confidence in the capabilities and creativity of the Ministry of Defense. This achievement will enable us to increase the research and development budget, create new jobs, and especially to ensure the IDF's supremacy in the coming years."

# Mobileye to supply systems for 8m cars to European co

Mobileye CEO Amnon Shashua told "Reuters" that he expects self-driving taxis to be on the roads by 2021.

Intel Corp's Jerusalem-based autonomous driving unit Mobileye has signed a deal to provide a European carmaker with its self-driving technologies for eight million cars, "Reuters" reports. The name of the car manufacturer and financial details were not disclosed.

Mobileye SVP advanced development and strategy Erez Dagan told "Reuters" that the contract for the advanced driver assisted systems will begin in 2021, when Intel's EyeQ5 chip, which is designed for fully autonomous driving, is launched as an upgrade to the EyeQ4 that will be rolled out in the coming weeks.

Intel acquired the Israeli company last year for \$15.3 billion.

Mobileye CEO Amnon Shashua told "Reuters," "By the end of 2019, we expect over 100,000 Level 3 cars with Mobileye installed." In Level 3, "Reuters" added, the car is self-driving but the driver has about 10 seconds to take over if the system is unable to continue.

Mobileye told "Reuters that it is also testing a more advanced Level 4 technology in Ford Fusion hybrids with 12 small cameras installed and four of the soon-to-be-released EyeQ4 chips in the trunk. In a test witnessed by "Reuters" reporters, these cars are able to drive on Jerusalem highways in midday traffic with no driver interference.

Mobileye says that while its Level 4 systems will start production in 2021, many of its technologies are relevant to creating systems that may soon be purchased by consumers. Shashua said that based on commitments from automakers, self-driving taxis - called robotaxis - should start hitting roads around 2021.

"When designing our system we are looking at all what can be used today, in a year, in two years and then the robo-taxi," Shashua said.

### Israeli co V-Wave raises \$70m for heart failure device trial

Lead investor Deerfield Management's Dr. Andrew ElBardissi: This technology has the potential to be the standard of care for a large segment of HF patients that continue to worsen despite the use of approved drugs and devices.

Israeli company V-Wave Ltd., which has developed a proprietary, minimally invasive implanted interatrial shunt device for treating patients with severe symptomatic heart failure (HF), announced today that it has closed a Series C financing of \$70 million led by Deerfield Management along with participation from new investors - healthcare funds Endeavour Vision, Quark Venture and Aperture Venture Partners. All of V-Wave's existing major investors are also participating in this round, including strategic investors Johnson & Johnson Innovation (JJDC Inc.) and Edwards Lifesciences, along with BRM Group, Pontifax, Pura Vida Investments, TriVentures, BioStar Ventures, and Israel Secondary Fund.

Having received approval from the FDA to initiate a pivotal IDE study, V-Wave also announced the upcoming launch of its global, randomized, controlled, double-blinded multicenter clinical trial - the RELIEVE-HF study - evaluating the safety and effectiveness of its novel device therapy in HF patients with Class III or ambulatory Class IV symptoms with preserved or reduced ejection fraction already receiving optimal therapies.

With more than 26 million people suffering from chronic heart failure globally, heart failure is the leading cause of hospitalizations in many countries; in the US, it is Medicare's largest expense for acute hospitalization. Heart failure patients experience repeated hospitalizations, a poor quality of life, and a greatly reduced life expectancy.

Ben-Haim said, "I am very pleased that Philips will become the home for our innovation, our business and our people. Philips' expertise and leadership in interventional imaging and navigation is an excellent strategic fit with EPD. I am convinced that as part of Philips, we will be able to grow EPD and help many electrophysiologists and patients worldwide, as we aim to reduce procedure costs, simplify navigation and treatment, and ultimately improve procedure efficacy."

"EPD's breakthrough innovation provides detailed 3D anatomical information of the heart during cardiac arrhythmia ablation procedures that is unique in the industry," said Frans van Houten, CEO of Royal Philips. "The technology has the potential to address the key unmet need of real-time therapy assessment, which is one of the more significant limitations of the current standard of care. This acquisition will strengthen our ability to improve the lives of arrhythmia patients, and is entirely consistent with our strategic plan to broaden our imageguided therapy solutions portfolio and drive long-term profitable growth for Philips."

# Clal Biotech co Neon Therapeutics to raise \$115m

The IPO is designed to fund the company's clinical trials in cooperation with Merck and BMS.

Neon Therapeutics, which is developing an anti-cancer vaccine, is planning on raising \$115 million in a Nasdaq IPO at a company value of \$450 million, before money.

Neon Therapeutics is a US company in which Israeli company Clal Biotechnology Industries Ltd. (TASE: CBI)has been a shareholder from the beginning. If and when the offering takes place, Clal Biotechnology's stake in Neon Therapeutics following the IPO will be 5%.

Clal Biotechnology's share price gained 2% today, pushing the company's market cap up

to NIS 480 million. Clal Biotechnology, managed by CEO Ofer Gonen, is indirectly controlled by billionaire Len Blavatnik through Clal Industries and Investments.

Neon Therapeutics' product can be combined with immunotherapy technology, which currently achieves excellent results, but only in a small proportion of patients. The company hopes that when this treatment is combined with Neon Therapeutics' product, the immunotherapy will become more effective in a higher proportion of patients.

Neon Therapeutics is already cooperating with Merck, which manufactures the Keytruda drug, and with BMS which manufactures\ immunotherapies made by the Opdivo and Yervoy companies, which are leading companies in this market. These and other cooperative efforts with less well-known companies are already generating revenue for Neon Therapeutics and are providing financing for some of its research.

# Outbrain buys Israeli UI optimization co AdNgin

Outbrain exec: AdNgin removes the guesswork of digital advertising, allowing us to automate the optimization of our reader experience.

Israeli media recommendation platform
Outbraintoday announced it has acquired
Israeli startup AdNgin, a UI optimization
company built to enhance the reader
experience. This is Outbrain's sixth acquisition
to date. No financial details about the deal
were disclosed.

Founded in 2006, and having raised nearly \$200 million to date, Outbrain connects publishers, marketers and consumers through personalized, interest-based recommendations. AdNgin focuses on that same level of personalization, individually optimizing the reader experience based on their visual preferences.

Outbrain head of global operations Asaf Porat said, "AdNgin removes the guesswork of digital advertising, allowing us to automate the optimization of our reader experience. It's fascinating to see a technology that can make continuous improvements and lead to significant uplifts of RPMs and CTRs."

After a short, six-month pilot, the consistent double digit CTR lifts shown sealed the deal for the two, personalization-driven platforms.

Outbrain founder and CEO Yaron Galai said, "As we're innovating our platform with transformative initiatives - in-feed autoplay video and endless feeds of content discovery we can't forget what makes Outbrain perform in the first place: reader personalization; from the personalization of content to the personalization of UI. This acquisition will help us seamlessly focus on the entire, personalized journey."

AdNgin cofounder Amnon Lahav said, "Joining forces with a native powerhouse like Outbrain, which organically outperforms the competition using interest-based recommendations, couldn't be a more perfect digital advertising match. This is an incredibly exciting start to a high-converting content adventure, both for us, and the end consumers."

#### Credit Suisse to raise \$250m for Nacht's aMoon Fund

aMoon's \$500 million second fund will be Israel's largest-ever life science venture capital fund.

Israeli healthcare and life sciences venture capital firm aMoon, founded by Marius Nacht and Dr. Yair Schindel, has signed an exclusive agreement with Credit Suisse for Europe to raise \$250 million - \$100 million from institutional investors and a further \$150 million from family office investors.

Having already closed investments from Marius

Nacht himself and other investors in Israel, the US and Canada, aMoon Ventures second healthcare and life sciences venture capital fund, which will be officially launched in Tel Aviv this evening, could reach at least \$400 million. This would make it the largest-ever Israeli life sciences investment fund, easily surpassing OrbiMed Advisors LLC \$307 million second Israeli life science investment fund.

Schindel said, "This is Credit Suisse's largest ever investment in an Israeli fund. The fund carried out due diligence over three month during which time hundreds of hours was invested in investigating the management of our first fund and over 60 interviews were carried out with organizations that work with us "

aMoon also plans signing a similar exclusive agreement with an entity in the US and perhaps also in Canada.

Credit Suisse head of emerging Europe Robert Cielen said, "We have been given by aMoon exclusivity to offer our clients to invest \$250 million in aMoon's new fund. This is part of our strategy to seek differentiated investment opportunities for our clients, especially wealthy individuals who have an infrastructure in place for these kinds of investments, i.e. family offices. Some of them are already generally interested in the healthcare-tech area."

"We see as a growing trend the use of technology for improving the human condition, and are very interested in what AMoon is doing. We are especially interested in the use of technology in healthcare."

"Credit Suisse is already pursuing a digital health strategy and also a robotics strategy, both invested in public companies, and there has been much interest in both of them from our clients. Many of our clients are entrepreneurs themselves, and they want to invest in disruptive technology."

#### Israeli startups raised nearly \$400m in April

Heart failure device company V-Wave completed the biggest financing round last month, raising \$70 million.

Israeli startups raised nearly \$400 million during April, according to press releases issued by companies that have completed financing rounds. The figure may be more as some companies prefer not to publicize the investments they have received.

This sum can be added to the more than \$1 billion that Israeli startups raised in the first quarter of 2018, also according to press releases issued by the companies.

Thus with one third of 2018 gone, startup raising this year is well below the record \$5.24 billion raised in 2017, according to IVC-ZAG, which was up from \$4.8 billion in 2016, which was itself a record.

Heart failure device company V-Wave completed the biggest financing round last month, raising \$70 million. Application visual management software company Applitools raised \$31 million and Internet-of-Things cybersecurity company Armis raised \$30 million. Among other big financing rounds ecommerce global logistics company Global-e raised \$20 million, property management company Guesty raised \$19.75 million and Ayala Pharmaceuticals raised \$17 million.



Please enroll me as a subscriber to the Israel High-Tech & Investment Report.

I understand that if not satisfied, I may cancel my subscription at any time and receive a refund of the unexpired portion. I enclose a check for \$95 (or the Israeli shekel equivalent and 18% v.a.t.) and am sending it to POB 33633, Tel-Aviv 61336.

I am providing you with my name, title, mailing address,e-mail and telephone.