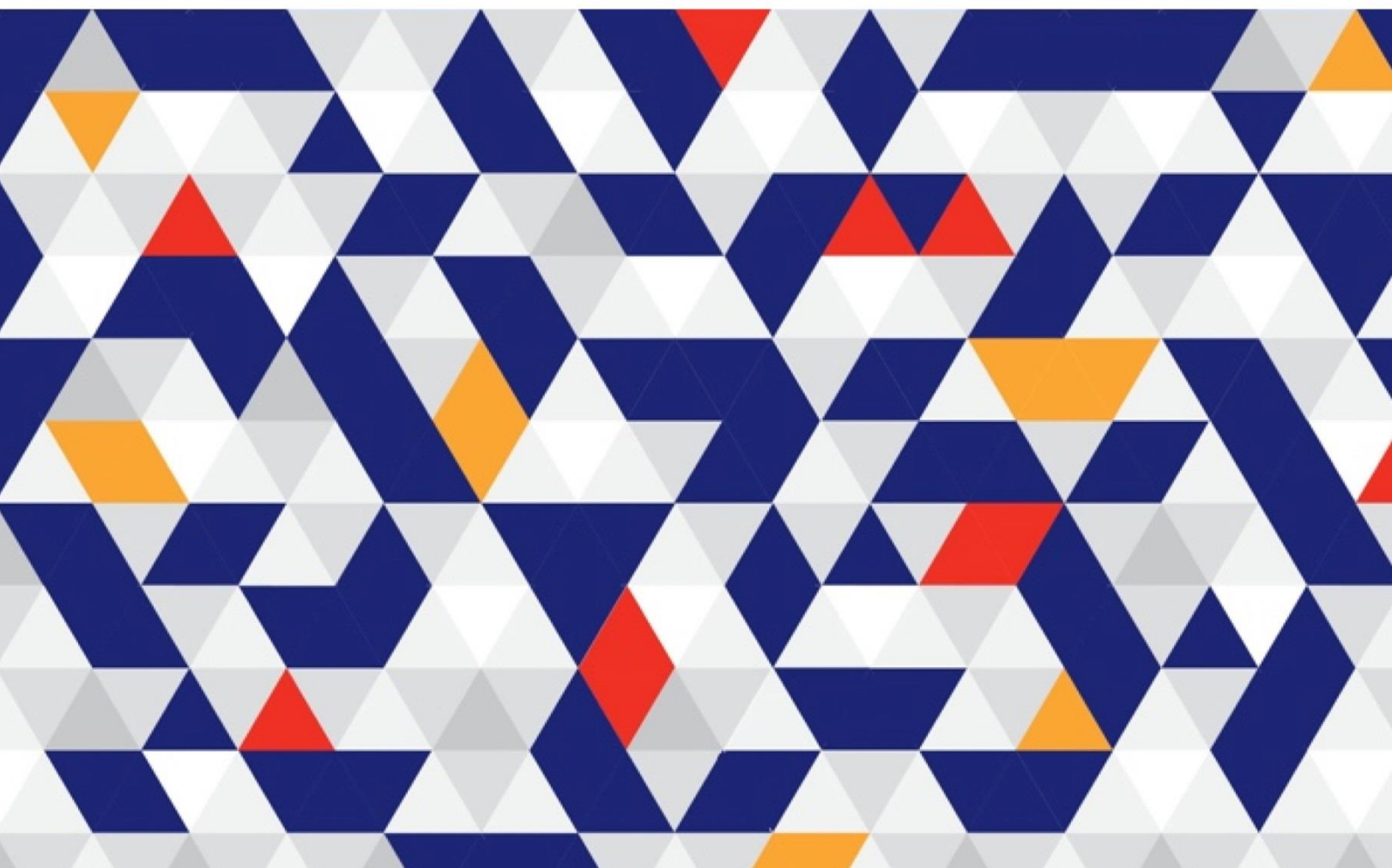


Quarterly Digest
Israeli High Tech
Market



(4th Quarter, 2013)



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Introduction

This digest is an overview of the high tech industry, venture capital and adjusting areas news line of Israeli Hebrew written press and blogs. The main purpose of it is to present an unbiased picture of what is happening on one of the most vibrant technology markets. Usually, every technology start-up is trying to be secretive and not to reveal too much. Significant events in the company life (fundraising, M&A, significant trade transactions and contracts) allow the observers to get a picture of the market, to spot trends, to see where the investors (VC funds) are putting their money and what are strategic players after. This analysis will help policy makers, entrepreneurs, VC professionals and academics engaged in technology to understand what the future "hot topics" are and to be up to date with the most relevant industry trends. It will also help to understand when in the company life cycle, there is a right time for investment round, for strategic investor or for complete exit. It will allow technological entrepreneurs to understand who can be valuable partner or buyer for their company or technology or what are the factor of attraction for the VC funds. VC professionals can see what their colleagues are after, to question or adopt their logic and to validate their own investment agenda.

Report methodology

The report trying to present the news as they appeared however trying also to impose some structure. Since it's the first digest of this nature, we are still experimenting with the format and will appreciate comments and suggestions from our readers. In terms of structure, we split the news line into the following major topics:

- Fundraising (either on stock exchanges or from VC funds)
- M&A (acquisitions of companies , mostly by a leading player in the sector)
- VC related news
- Technologies

- Companies of particular interest for Russia

Within each of the topics above (where it's relevant) we added additional split into subsectors:

- IT
- Mobile
- Biotech
- Medical Technologies
- Energy efficiency & Cleantech
- Engineering

The opening part of the report presents several trends that we identified. It quite possible that an educated reader will be able to pick additional technological trend or derive a different conclusions based on the same data, again, we will be happy to learn and discuss. This digest means to be a tool for review, discussion and learning.

2013 – A Good Year for Israeli Tech Sector and Q4 Is Not an Exception

In 2013 the Israeli high technology market have experienced a year of prosperity with a large number of M&A deals and a record breaking funding which have been invested in Israeli companies. Since exit is the culmination of the corporate life cycle, it's worth to mention the most noticeable acquisition/exits of 2013:

- Waze, a mobile navigation app, acquired by Google for close to \$1.1bn in June 2013. Waze services have been implemented in Googles navigation services, with special consideration of traffic information.
- Trusteer, an IT security company, has been acquired by IBM for \$650M in September 2013, making it the largest acquisition of IBM in Israel yet. The investors of the company multiplied their investment by a staggering 65 times.
- PROLOR, a developer of biological medications ingredients, has been acquired by Opko Health for \$480M during April 2013. Dr Phillip Frost the chairman of Teva Pharmaceuticals (NYSE and TASE) is the CEO of Opko and a major shareholder in PROLOR.

- Intucell, a developer of technology for improving cellular network data transfer, have been acquired by Cisco for \$475M during January 2013. The acquisition of the company represents a \$471M profit on the investment of only \$6M.

- Scale IO, developer of server side storage software, was acquired for \$300 by EMC making it second EMC acquisition in Israel within a year (in May 2012 EMC paid \$430mn for Xtreme IO, another Israeli company engaged in storage solutions development).

The Trends

Public Market reopened for Israeli tech companies

All totaling at \$4.9B until the beginning of Q4 2013 with an impressive list of Exits during Q4 some by acquisition and some by IPO. Israeli high tech companies have raised a total of \$1.6B during 2013 in the US stock markets, by IPOs, seasoned offerings and more. The raised amount is record high since 2007 (with \$1.8B raised) a positive sign for the local high-tech industry after the credit crunch of 2008. This year only 12% of the amount raised was by technological companies and Biomed companies raised 23%. 22% of the amount raised came from IPOs in the American stock market, if eliminating Kamada and Mazor Robotics that were already traded in TASE (Tel Aviv Stock exchange), IPOs stand for 15% of the funds raised.

The following list contains the technology and biotech companies that raised on the US stock markets¹:

The company	Month of the raise	Amount raised millions of Dollars	Return of the stock
Symtron	3/13	15.1	27.2%
Micronet Enertec	4/13	9.3	-14%
Symtron	5/13	15.7	6.9%
Symtron	8/13	6.2	11.3%
Arotech	9/13	6.9	12%
Wix	11/13	127.1	4.8%
Keryx Biopharmaceuticals	1/13	69.9	53%
Medgenics	2/13	31.9	27.8%
Inspire MD	4/13	25	50%
Alcobra	5/13	25	106%
Kamada	5/13	59.4	63.5%
Enzymotec	9/13	71.2	56.6%
Alcobra	10/13	38	-0.1%
Mazor Robotics	10/13	46.9	11.1%

¹ <http://www.globes.co.il/news/article.aspx?did=1000893435>

Q4 brought with it the most notable of the recent Israeli activities on the US stock market, an IPO of the Israeli website building platform WIX, with more than \$127M raised on the NASDAQ stock exchange. The IPO comes after a sharp rise in in the Income of the company from \$9.9M in 2010 to \$43.7M in 2012 and 55.53\$ during Q1-Q3 2013 from its 680,000 paying customers (according to the company) and more the 37M users worldwide. Although the company have achieved significant rise in its income it have yet failed to become profitable, with a net loss of \$17.802M during Q1-Q3 2013. The company operates a development center in Israel and Ukraine. (Dnepropetrovsk) The IPO represents a total valuation of \$765M to the company representing a decent return for the investors which have invested \$41M since WIX inception during 2006. The main investors of WIX are Mangrove capital Partners which holds 22.5% of the company and Bessemer venture partners with 21.7%. The underwriters of the IPO were JPMorgan, Merrill Lynch and RBC along with Needham & Company^{2,3}. The return of the IPO on major stock exchange as NASDAQ carries not only additional exit opportunities for VC's or some paramount for the entrepreneurs to aspire, but it has a big psychological effect on the market as a whole. Every document or presentation about Israeli high tech industry proudly mentions the high numbers of Israeli companies on NASDAQ. NASDAQ is not only source of financing but also kind of badge of honor and mark of global recognition. That is why the reopening of it carries added psychological value for the Israeli market. This IPO will also add some confidence to other Israeli companies that are contemplating their IPOs on NASDAQ like Outbrain that just completed a round of pre IPO financing (see item on below) and has \$1bn IPO ambitions for the next year. (Please see below on additional companies planning to take this route).

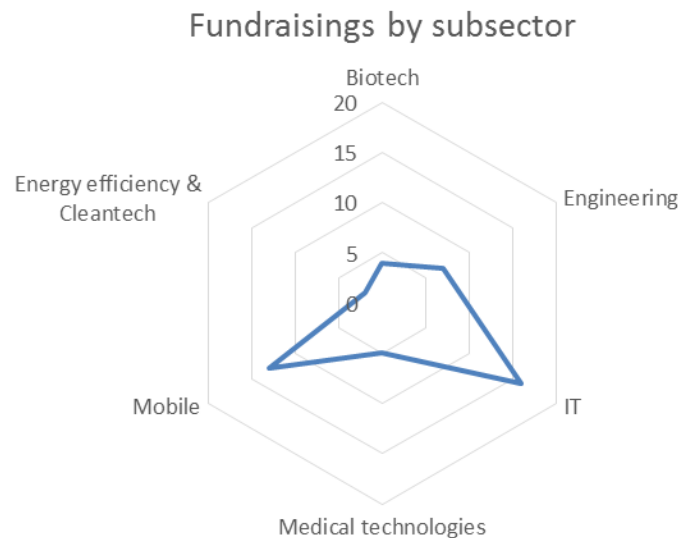
IT and Mobile are the engines of the local industry

There were also no surprises as for the focus areas of the local industry. Traditionally software development was very strong side of Israeli industry while new materials and chemical engineering where less impressive due to the absence or almost absence of the supporting industries. An IT sector (which is very wide definition though) was very

² <http://www.globes.co.il/news/article.aspx?did=1000891936>

³ <http://www.themarket.com/technation/1.2158168>

colorful including IT solutions that shall be considered clean-tech (water and energy saving), homeland security (big data analytics of marine vessels movements, that helps to catch weapons trafficking and similar). Additional and not surprising observation is a strong presence of mobile (that we decided to separate from IT to a special category because of its significance) (see chart below).



Enterprise software is an old-new superstar

Interesting trend that we can spot, and was confirmed in the background conversations with market practitioners is the massive return of enterprise software sector. After being the stepson of venture funds for quite a while, we can see massive investment and impressive exits in this sub sector. Without going into deep analysis, one can point on **cloud computing and SaS** as main drivers of the trend. It seems that established software companies are ready to pay top dollar for innovative solutions that will give them age in this fast developing segments and improving economy allows CIO to spend money on productivity increasing software solutions. VC are seeing (or smelling) this demand and in their turn happy to back variety of start-ups in this field. What is interesting about it is the circle of life of certain sector within ecosystem. Many years ago, enterprise software was a popular investment theme with VC industry, then, it lost its attractiveness in the eyes of VC's and now it's back. We discussed the changing fashions in VC investment both in Israel and globally in the report on Israeli ecosystem. This comeback is due to technological breakthrough and it also gives hope that some areas

that VC were avoiding recently (semiconductors, communications) might be back on the investment map someday.

Additional driver of that we can spot is the growth of **e-commerce**. Quite large number of companies that raised capital are engaged in one or other aspect of supporting e-commerce. The field seems to be endless with lots of instruments already developed and to be developed to support this fast growing activity.

Chemical industry and new materials

These industries were neglected by the press. Slightly deeper look, will show that Israeli chemical industry is far from being innovative and is mostly engaged in extraction of phosphates from the areas adjacent to the Dead sea and oil refining for local needs and detergent production for local needs (except for some successful pesticides producer which grows outside of Israel). Small volumes and domestic focus reduce the need to innovate or be competitive. There is quite successful local pharma industry with big numbers of chemists deployed however the news there categorized as medical rather than manufacturing. There is very strong scientific base in chemistry and two recent Nobel laureates from Israel where in the field of chemistry however it was either theoretic research or medical and biotech applications. The apparent lack of innovative news in chemical industry (at least in the period covered by this report) demonstrates that the innovation in other industries is driven by global competition and need to be up to date and better than the others. The moment this drive disappears, like in the case of local market oriented, hardly facing any competition, chemical industry, there is nothing that drives innovation. It goes for new materials as well. The demand for new materials is driven by the industry. Whenever you meet some challenge in semiconductors or capital equipment manufacturing, new material shall be one of the possible solutions. Since local VC industry is hardly if at all supporting semiconductors or capital equipment sectors, the innovation in this field is in decline. Manufacturing migration to the Far East contributed negatively to this trend.

It's quite possible that the luck of this sectors will change one day and they will be again everybody's darling like in the case of enterprise software. It remains to be seen.

R&D centers of multinationals – From Facebook to unknown insurance company- everybody want boots on the ground

As it was mentioned in the analytical report on Israeli technological ecosystem, R&D centres of international technology companies played and still playing important role in the development of the local ecosystem. They are one of the major sources of new management methods, additional knowledge and giving Israeli managers an opportunity to go and spend several years abroad in the headquarters and to receive different perspective. Nobody knows for sure how many are out there and numbers vary from 150 to 250. One of the ways foreign players are establishing their permanent presence in Israel is through the acquisition of the local start up. In Q4 only, the following acquisitions lead to the establishment of the permanent R&D centers: **ZeroVM** – acquired by RackSpace, **Soluto** – acquired by Asurions, **For Each** – acquired AutoDesk, **multimedia solutions division of Alcatel-Lucent Israel** – acquired by NantWorks, and last but not least is **Onavo**- acquired by Facebook and according to Onavo officials, will be the base for the foundation of a Facebook R&D center in Israel. Founding of pharma and biotech incubator by Merck also can be considered part of this trend.

Source of technology for Asian giants

Additional noticeable thing is the great interest Asian investors are expressing in Israeli tech sector. Few events that happened in Q4 illustrating this interest: Li Ka Shing, Hong Kong based real estate mogul, one of the richest people in Asia and active investor in Israeli technology sector (through Horizon Ventures, his venture arm) donated a record breaking \$130 mn to Technion (Israeli Institute of Technology) conditional on opening of Technion facility in China , series of acquisitions in Israel in variety of technology related sectors and investments from Asian market leaders like Alibaba, Samsung and Singtel are clear signs of this interest. The trend of growing trade relations is backed by the Israeli government and especially by The Ministry of Economy led by Naphtali Bennett.⁴ Various trade agreements have been signed with the Chinese

⁴ <http://www.themarket.com/news/1.1996283>

government and many provinces of China. More detailed info about is below in the report.

There is hard to find some clear trend in biotech and medical technology sectors, maybe partly due to smaller number of transactions.

Future trends – modest prediction attempt

Although predicting the future is usually not a rewarding task, moreover predicting future trends, we can assume that at least the first part of 2014 will continue the good dynamics of 2013. All the activity that is described here creates a positive buzz around Israeli high-tech industry. Recent activity of the sharks (Google, Facebook, EMC, IBM, Samsung and others) will bring around midsize players from both US and Asian market. Israeli companies are deliberately playing on both US and Asian markets in the same time and some are starting Asian marketing effort much earlier than going to an easier and more familiar US market. In turn, it will fuel the VC industry. In VC, we shall expect a trend of further internationalization. Already, foreign funds are playing a significant role on Israeli market and it expected to continue. In previous cycles, there were no gradual decline and the high-tech and VC industry in Israel were growing fast and then contracting sharply with the crises (in 2001 and in 2009). Now it seems that globally, technology sector is out of the woods, ahead of general economy, and if the recovery in EU and US will continue, we have all reasons for optimistic outlook on the local industry.

Not everything is rosy and Israeli industry will continue to deal with brain drain and premature exits. Israeli high-tech community in Boston is good illustration to a worrying trend of Israeli entrepreneurs following the market, the easier access to customer and to funding. More than 200 Israeli companies operating in Boston area and they created \$12bn value for the state of Massachusetts (about \$6bn of income and similar amount in their spending on local market). It's easy to understand the entrepreneur's motivation. The companies that moved to Boston managed to raise more money and to grow faster than their peers that stayed in Israel.⁵

⁵ <http://www.themarket.com/technation/1.2190345>

Fundraising during Q4

Compared to the \$660M raised by Israeli high tech companies during Q3 2013, as reported by the IVC and KPMG Q3 survey, Q4 have been as fruitful with a total investment of more the 471 million dollars raised by Israeli companies in 2 month of the quarter.

IT

SundaySky, a developer of Smartvideo platform that allows companies to communicate with their customers with real time custom made videos have completed its 3rd funding round with \$20M being raised. The funding round was led by Comcast Ventures and included Vintage Ventures, Liberty Global Ventures and the previous investors Carmel Ventures, Globespan Capital Partners and Norwest Venture Partners. Company officials have stated the growth rate of the video viewing have been 200% in the last year with more than 140M viewings⁶.

SAManage, a developer of SaaS based computing asset management solutions, has completed a second funding round of \$5M lead by Carmel Ventures and Gimini Ventures. The company have raised \$2.3M in its seed round and \$3M on its first round from Carmel Ventures. The company has developed a tool called Service Deck, which is used to manage service requests to the IT department and manage the IT equipment inventories. The company has customers in 45 countries with companies such as Groupon and Evernote using its services⁷.

Mintigo, a developer of marketing intelligence system for client filtering and recognition of prospects potential, has raised \$10M in its 3rd funding round from well-known investors such as: Adams Venture Partners, Sequoia Capital and Giza VC. As part of the funding round it have been agreed that David Welsh, a partner in Adams VP, would join the management board of the company. The company has been founded during 2009 by a group of former employees of Dov Moran's Modu⁸.

⁶ <http://www.geektime.co.il/sundaysky-20-million-round-c/>

⁷ <http://www.geektime.co.il/samanage-raises-5-million-dollars/>

⁸ <http://www.geektime.co.il/mintigo-raises-10-million-dollars/>

CoolaData, a developer of behavior analysis tool for commercial websites, has announced the completion of its first funding round with \$7.4M raised. The current funding round was led by two VCs: GreyLock Israel and Carmel Ventures. The system the company have developed, traces surfers usage patterns, using big data technology, allowing the site to allow tailored products for the customers. Carmel Ventures have been founded in 2000 and lead 3 funds since managing more the \$600M. Carmel is affiliated with Viola group, a technologically oriented private equity group, with more than \$1.8B under management. Viola is one of the largest investment groups in Israel. Some of the most notable exits of Carmel ventures are: Folloap acquired by Neustar for \$140M, Actimize acquired by Nice Systems for \$280M and ECI Telecoms acquired by a group of private equity investors for \$1.2B⁹.

Outbrain, a developer of tool for recommendations for content on the internet, has announced the completion of a funding round of \$35M lead by HabourVest fund, an American fund famous for investing in other VCs. Outbrain, which is considered to be the best content recommendation platform in the world, has raised \$100M since it was founded 7 years ago. HabourVest has invested in a verity of Israeli VC's and some companies that went later on to an IPO such as Ceragon and Radware. The significant amount raise was rumored to be an alternative for an IPO. According to the recent assumptions, the funds would be used to increase the company market penetration and revenues, leveraging it position before an IPO. The current revenues of the company have reached an \$120M-\$140M with most of the growth been done in the last 3 years. According to the assumptions on the Israeli market, Outbrain will go on an IPO next year with a valuation of \$1B¹⁰.

Pursway, a big data research company, has completed a B series funding round of \$7.2M from Battery ventures and Globespan Partners, bringing the total amount raised by the company to \$17M. Pursway product allows using big data analytics of company databases in order to optimize influencer marketing of products and services. Among the company clients such household names as Sony, Orange, Comcast and other companies in verity of markets, providing access to a database of more than 100M US users¹¹.

⁹ <http://www.themarker.com/technation/1.2147036>

¹⁰ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615070,00.html>

¹¹ <http://www.themarker.com/technation/1.2132032>

Stratoscale, a developer of a virtualization technology meant to improve the efficiency of large data centers, has announced the completion of a \$10M funding round. The funding round was led by Battery Venture and Bessemer Venture Partners (which recently made an exit with Solutio). The two VCs would put their representatives in Stratoscale board. Stratoscale has been founded by two well-known names in the Israeli high-tech scene:

- Ariel Maislos who founded Passave, a semiconductor company, which was acquired by PMC-Sierra in April 2006 for an estimated \$300M. More notably he founded Anobit which was acquired by Apple during 2012 for half a billion dollars.

- Itay Bogner the founder of Neocleus, which was sold to Intel in 2010 for several hundreds of thousands of dollars, and Sofaware which was sold to Check Point in 2002.

According to Maislos the company would offer an operation center for large data centers, improving their performance and electricity consumption efficiency¹².

Righttune completes a \$700k funding round from Capital Point, an investment company, and the OCS grant program. The company's product is used to integrate music into websites allowing web site owners additional means to increase their site exposure. Righttune have been founded by Erez Perlmutter, Gandi Tripon and Yossi Barak in 2010¹³.

Feedvisor, a developer of an automated pricing algorithm, has announced the completion of \$1.7mn funding round, with a total of \$2.7 mn raised to date. The funding round was led by JAL Ventures, Horizon Capital and Micro Angel Fund. Joshua Levinberg a partner in JAL would join Feedvisor board according to the investment agreement. The patented algorithm analyses the competitive environment and automatically determines a price based on the business's goals. The company declared that since implementing its SaaS solution, the company income rose by 800% mostly due to use by Amazon marketplace retailers¹⁴.

¹² <http://www.calcalist.co.il/internet/articles/0,7340,L-3615509,00.html>

¹³ <http://www.geektime.co.il/righttune-700-k-seed-round/>

¹⁴ <http://www.geektime.co.il/feedvisor-raises-1-7-million-dollars/>

Qlika, a developer of a marketing management platform, has announced the completion of its first funding round with \$1.7M raised. The funding round was led by Hillsven Capital VC joined by a group of private investors. Qlika's platform takes the business's marketing budget or part of it and automatically manages it using integration with Google and Bing services, according to the business's preferences. Among Qlikas customers are: Yellow pages, Redbeacon, Thumbtack, Where2getit, Fidelity, Alicanto and Hometalk. The company has been founded in 2012 by three veterans of an IDF technological unit and employs 9 people in Ramat Gan and Palo Alto¹⁵.

Windward, a developer of a technology for analysis of ships and boats movement in the sea, has completed an A series funding round raising \$5M from Aleph ventures. This is the first investment of the new Aleph fund, after raising \$140M in July this year. Aleph founded by Michael Eisenberg, a former partner in Benchmark capital, and Eden Shochat, one of the founders of Face.com which was sold to Facebook, with the target of creating large Israeli multinational companies. Windward have been founded in 2010 by two Israeli former naval officers. The company product allows big data based analysis of marine vessel movements allowing to trace smuggling of goods, weapons, human trafficking and illegal fishing. The funding round comes after a sharp rise in the company customer base mainly in the defense and intelligence markets¹⁶.

Garantia Data, a provider of Redis cloud services for Enterprise organizations, has announced the completion of a \$9M funding round. The funding round was led by Bain Capital, Carmel Ventures and an unknown private investor. This is the company's first funding round after a successful seed round in 2012. The company has been founded in 2011 and since then has grown, with more than 1000 paying customers to date. The trend in the last few years in the database industry is the use of NoSQL platforms that enable creation of practically unlimited databases. The main feature which distinguishes Redis from other services, is the fact the data base is located in the RAM memory allowing fast use of the database. The benefit of Garantia comes in its cloud based

¹⁵ <http://www.geektime.co.il/qlika-raises-1-7-million-dollars/>

¹⁶ <http://www.themarker.com/technation/1.2158173>

solution call Redis Cloud that allows limitless size databases and a solution for servers' failure at Redis¹⁷.

Checkmarx, a developer of analytical computer security tools, has announced the completion of a \$8M funding round lead by an unknown private equity financial investor. It is presumed that the company's current investors, XT Group and Salesforce.com, which invested \$6.5M so far, have joined the funding round. Checkmarx patented product, analyses computer codes in order to find security problems and recommends how to repair them with a main focus on Apps. Checkmarx won the 8th place in Deloitte's fastest growing companies contest with a growth of 2,200% over 5 years, with Trusteer (another computer security company) taking second place with 11,000% growth¹⁸.

Comillion, a developer of a platform for cyber intelligence, has announced the completion of \$2.6M round from a list of well-known investors in the Israeli high-tech industry. Among the investors in the company: Shlomo Kramer, Mickey Budai, Rakesh Loonkar, Swarth Group, USVP and Doron Livnat. The company has been founded in 2012 by Kobi Friedman¹⁹.

Biotech

Collect Biomed, a company that specializes in stem cell sorting technology, has completed a \$969K private funding round from a group of private investors. The company has developed a device for the bone marrow transplant market that reduces the cost of the extraction process, which is one of the most expensive treatments in modern medicine, mainly due to the high cost of the extraction process of the stem cells²⁰.

Arno Therapeutic, a medicine development company, have announced the completion of a \$30.7M round from its current investors. The company has been founded by Arie S. Belldegrun, a director in Teva and the founder of pharmaceutical companies which were acquired for

¹⁷ <http://www.geektime.co.il/garantia-data-raises-9-million-dollars/>

¹⁸ <http://www.globes.co.il/news/article.aspx?did=1000893024>

¹⁹ <http://www.calcalist.co.il/internet/articles/0,7340,L-3617537,00.html>

²⁰ <http://www.themarket.com/markets/1.2139119>

more than \$1B. Arno is traded on the over-the counter stock exchange in New York with a value of more than a \$100M. Among the investors in the company are: Pontifax Management company, Opko, Perceptive Advisors, Sabby Capital, Street Capital. The raised funds will be used for clinical development of Onapristone, a medicine used for the treatment of various kinds of cancer. Onapristone has past the human trials stage for breast cancer and has proven to be effective²¹.

Metabomed, a developer of cancer treatments, has been funded by an investment of 5 million Euros by the pharmaceutical giant Merck joined by Pontifex (an Israeli VC) and Boehringer Ingelheim from Germany. Another company which has been funded by Merck in the current investment round is ChenBio, a developer of MS treatments, both companies are part of a Biotech technological incubator which has been founded by these investments by Merck. Merck has made a commitment to invest a total of at least 10M Euros as part of the incubator it has founded²².

Medical technologies

Leviticus Cardio, a developer of wireless charging technology for heart assisting implants called LVAD, has raised \$1.44M in a first funding round lead by a group of American investors which were represented in Israel by Ron Lefler, CEO of Inventions Ltd. Today the implants are wired thus creating difficulties for the patients; the implant helps patients who suffer a heart failure to live for up to 7.5 more years. The company has been founded in 2008 by Michael Zilbershlag, Moshe Levi and Yegal Kasif, and so far, the device has successfully completed the animal test stage²³.

Apifix, a developer of a smart implant for treatment of Juvenile scoliosis, has announced the completion of its second funding round with several millions of dollars being raised. The funding round was led by Trendlines Medical technology incubator and American private investors. The company is planning to start selling the implants in EU later this year with a total market estimated at \$700M, with more than 70k surgeries performed each year. The new implants use only 2 Bolts instead of 20

²¹ <http://www.globes.co.il/news/article.aspx?did=1000890371>

²² <http://www.calcalist.co.il/internet/articles/0,7340,L-3618072,00.html>

²³ <http://www.geektime.co.il/leviticus-cardio-raises-4-million-shekels/>

being used today and allow shortening the duration of surgery to one hour from 5-6 hours²⁴.

Medigus, a R&D company in the field of Endoscopic surgeries, has announced the completion of a public offering raising \$7M. Endoscopic surgery is a procedure in which a camera inserted into the patient's body, and it's used to examine a variety of organs in order to locate cancer and polyps. Medigus strives to lessen the damage inflicted by those procedure reducing hospitalization costs and scars. Medigus is primarily known for its SRS system that treats GERD, a disorder in which acid fluids from the stomach rise through the gullet causing pyrosis which can deteriorate to cancer and ulcers²⁵.

Sensible Medical Innovations, a developer of non-intrusive medical instruments, has announced the completion of an estimated amount of \$20M funding round lead by Boston Scientific, a medical instruments company worth \$15.86B and traded on NY stock exchange. The company is a developer of medical instrument that is used for non-intrusive measuring of water in the lungs, in use with heart failure patients, allowing doctors to remotely follow the patient's situation from home. Sensible's monitoring device can be used with patients with heart failure, patients who use diuretic substances, patients recovering from artery problems and Renal insufficiency. Sensible Medical is currently in the clinical trials stage, with \$17M invested in the company since inception in 2007.

LapSpace Medical, a developer of Medical tools, has announced the completion of a \$1M funding round, from Trendlines technological incubator and the office of the Chief scientist (OCS). The company has developed a Retractor for the Small Intestine that will be used in Laparoscopic surgery. Laparoscopic surgery is the most widely used technic for abdominal surgeries; a major problem in preforming the surgery is to shift the Small Intestine in order to get to the targeted organ. The developed instrument is made of a balloon, a fact that contributes to the recovery of the patient²⁶.

²⁴ <http://www.geektime.co.il/apifix-raises-second-round-from-trendlines/>

²⁵ <http://www.geektime.co.il/medigus-7-million-round/>

²⁶ <http://www.geektime.co.il/lap-space-medical-raises-million-dollars/>

Engineering

N-Trig, a touch screen technology developer, has announced the completion of a \$4.5M round raised from 12 different investors. The raised amount joins a previous amount of \$11.4M the company raised earlier this year. So far the company has raised an impressive amount of \$99M since inception, some of it from well-known investors such as Microsoft, Canaan Partners, Evergreen and others. N-trig's technology can be found in various devices ranging from cell phones, computers and tablets, including devices of HP, Dell, Asus, HTC, Toshiba and more²⁷.

Wilocity, a developer of a chipset for high-speed wireless networks, have completed a funding round of \$35M lead by Vintage Investment Partners and Jerusalem Global Ventures and joined by a group of current investors in the company. The company has developed the 60Ghz chip which allows 10 times quicker wireless communication than the current Wi-Fi N11. The current round is the company's 4th with \$70M raised in total since 2007 when it was founded by 4 former Intel employees. The company major breakthrough came earlier this year when Dell announced it would include Wilocity products in its computers²⁸.

Rocktick, a developer of a GPU based simulation software for computer chip validation, has announced the completion of a \$3M funding round led by Intel Capital and NVIDIA. Among the investors in the company are Incentive technology incubator, Peregrine Ventures and Partech. The leading software product of the company is RocketSim, a software that accelerates the validation simulation by 10 times and reduces by 80% the Ram usage of the servers performing the tests. The current funding round brings Rocktick to a total of \$7M raised since its foundation in 2008 by three veterans of 8200 unit in the IDF²⁹.

Formlabs, a developer and manufacturer of 3D printers, has completed a \$19M funding round. The funding round was led by DFG Growth VC joined by Eric Schmidt's Innovation Endeavors VC, Pitango VC and other private investors. The company has been founded in 2011, with the goal of creating a personal 3D printer, by a group of designers

²⁷ <http://www.geektime.co.il/n-trig-venture-round-4-5-million/>

²⁸ <http://www.geektime.co.il/wilocity-raises-35-million-dollars/>

²⁹ <http://www.geektime.co.il/rocketick-raises-3-million-dollars/>

and engineers. Formlabs started in the Zell startup program of the IDC and raised \$3M on Kickstarter (crowd funding platform), much more than the original goal of \$100k, making it one of Kickstarter's best projects yet. Formlabs printers make use of SL (Stereo lithography) technology allowing it to print in better resolution than other personal 3D printers in the market³⁰.

Compass-EOS, a developer of a fast inter-chip communication technology, has announced the completion of a \$42M funding round, from a verity of investors. Among the investors are: Comcast Ventures, Cisco, T-Ventures, Crescent, North Bridge Venture Partners, Pitango VC, Benchmark Capital and Marker LLC which invested \$120M in the past and two new investors: a private US fund and Rusnano Corporation. The main product of the company is a chip, which allows optical processing within Silicon made computer chips³¹.

Xtreme Reality, a developer of 3D motion recognition technology, has announced the completion of \$10M round. The funding round was led by Marker LLC and another unknown investor. The technology the company develops allows recognition of 3D movement using any 2D camera, allowing the use of existing firmware. The announcement comes just days after a major acquisition done by Apple that have acquired Primesence, the developer of the Kinect sensors. The market of movement recognition have been booming lately in Israel with the Primesence deal, Eyesight, Omek interactive (acquired by Intel), Point Grub and uMoove³².

Energy efficiency & clean-tech

Panoramic power, a developer of an EMS tool for reduction of electricity use in commercial buildings, has completed a \$8M funding round led by Marker LLC fund. This is the company's second funding round with funds raised from GreyLock, Israel Cleantech, Clalcom, Qualcomm Ventures. Panoramic Power has developed a cloud-based

³⁰ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615248,00.html>

³¹ <http://www.geektime.co.il/compass-eos-raises-42-million-dollars/>

³² <http://www.calcalist.co.il/internet/articles/0,7340,L-3617976,00.html>

system for management of electric grids, the system can find hurdles in the grid and overuse in specific points³³.

Takedu, a developer of a SaaS (software as a service) based solution for water grid monitoring, has raised \$6M from 3M New Ventures, the investment department of 3M, who became a strategic partner. The current funding is the company's 3rd round with the first investment of \$3.5M raised in 2009 and the second on the sum of \$6M, both from ABB Technology Ventures with Giza, Gemini and Ematald Technology Ventures. The company has developed a big data based algorithm that monitors water infrastructure, the software can alert about various problems much earlier than currently used systems. According to Guy Horwitz the VP of marketing of Takedu, the water lost in the infrastructure, can amount to millions of dollars a day in a large city like London³⁴.

Mobile

Quixey, a developer of a search engine for apps, has announced the completion of a C series funding round with \$50M raised. The funding round was led by Chinese AliBaba, the largest Chinese mobile trading site, joined by GGV Capital and the current investors of the company USVP and Eric Shmidt's Innovation Endeavors. The current funding round raises the amount invested in the company to \$74M since its inception in 2009 by Tomer Kagan and Liron Shapira. The company's main competitor Chomp has been acquired by Apple last year and integrated into the apple app store. This investment of AliBaba is yet another example of Chinese involvement in the Israeli high tech market.

Kidoz, a developer of a mobile/tablet platform for children, has announced completion of a first funding round of \$1.2M from Lool Ventures. The company has developed an interactive and protected platform that for smartphones and Tablets showing children only relevant contents. This funding round is the first after a seed investment of \$250k. The company will invest the money for the development of the System and the parent interface. Kidoz has been founded at 2009 by Guy

³³ <http://www.calcalist.co.il/internet/articles/0,7340,L-3614745,00.html>

³⁴ <http://www.geektime.co.il/takadu-raises-6-million-dollars/>

Hevkin with the purpose of building a safe way for children to interact with the internet³⁵.

Appoxee, an Israeli startup that has developed a platform for increasing the integration with mobile users, completed a \$1.8M seed funding round from Lazarus Israel Opportunities joined by Moshe Lichtman. The tool the company developed allows app developers to analyze user feedbacks to different push notices, allowing the development of tailored solutions and services³⁶.

MyCheck, a developer of mobile payment application, has raised \$4.2M in its second funding round led by a group of private investors which included among others: Saban Capital, Yoav Harlap and the Wertheimer family. The seed round of the company, \$1.7M, was been raised a year ago from the same investors. The funds would be used to enter new geographic markets³⁷.

SkyGiraffe, a developer of cloud based enterprise software for mobile phones, has completed a first funding round from Microsoft Ventures. The company offers an app building tool called SkyGiraffe studio, the tool allows IT departments to create a custom app for the organization in just 15 minutes. SkyGiraffe is the first company in the world to get funding from Microsoft Ventures, which was founded only a few months ago³⁸.

Keepy, a developer of an app which allows creating and saving personal digital memories, has completed a seed funding round of \$1.1M. The funding round was been led by a number of angel investors from Silicon Valley, New York and Israel, one of them is Mody Rozen from Magma Ventures. The App Keepy allows users to create a playlist of memories more interactively then photos and texts, allowing watching and sharing their memories using their mobile phones. Keepy was founded by Offir Gutelzon in 2013, this is Offir's second startup after his company PicScout have been acquired in 2011 by Getty Images³⁹.

³⁵ <http://www.geektime.co.il/kidoz-raises-1-2-million-dollars/>

³⁶ <http://www.geektime.co.il/appoxee-seed-1-8-m/>

³⁷ <http://www.geektime.co.il/mycheck-raises-4-2-million-dollars/>

³⁸ <http://www.geektime.co.il/microsoft-ventures-to-invest-in-skygiraffe/>

³⁹ <http://www.geektime.co.il/keepy-seed-round-1-1-m/>

Appsea, a developer of a platform for mobile app monitoring and analysis, has announced the completion of its first funding round of \$1M led by Giza VC along with a few well known investors in the Israeli High-tech industry, such as: Moshe Lichtman, Yeuda Doron and more. The platform the company has developed allows much deeper analysis of using patterns of the apps, allowing on the go improvement of the customers apps. Appsea's platform is currently available only for IOS although, according to company officials, the platform would be available to Android users in the coming months. There is a noticeable trend of mobile based product development companies raising funds, mostly in their second/third funding round. This comes as a continuation of the trend of less seed funding rounds and more midlife and mature companies raising funds from VCs⁴⁰.

Magisto, a creator of a video editing app, has announced the completion of its 3rd funding round with \$13M being raised. This round was led by Qualcomm ventures and Sundisk Ventures and joined by the current investors of the company **Horizons Ventures and Magma Venture**. Magisto's app provides the users with an automatic platform for editing their home videos and sharing them. With more than 13M downloads in the Google Play Market and Apples Appstore, the app is at the most downloaded in the photography and video category⁴¹.

TabTale, an Israeli gaming company, has announced the completion of its 2nd funding round, raising \$12M. The current funding round was led by Magma capital joined by Qualcomm, Vintage Investment Partners and a group of other investors. The company was founded in 2010 by Sagi Schlisser (CEO), Oran Kushnir (chairman) and Nir Bejerano (CTO) and raised \$1.5M on previous funding rounds. The company develops games for various platforms which are built for the use of young children. The company currently has more than 240 apps that were downloaded more than 20M times⁴².

Zula, a developer of a cloud based IM and video platform, has announced the completion of a second funding round from Microsoft Ventures, with an estimated amount of \$50k-\$250k raised. The platform the company is offering is a cloud based VoIP, IM and video conferencing

⁴⁰ <http://www.geektime.co.il/appsee-raises-million-dollars/>

⁴¹ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615587,00.html>

⁴² <http://www.geektime.co.il/tabtale-round-b-12-million/>

based on mutual interests and most of all a solution for corporate chat systems in the newly popular "Bring your own device" corporate world⁴³.

Mobli, a developer of a video sharing app, has announced a completion of a \$60M funding round led by Carlos Salim's, the world second richest person, company America Movil. The investment is part of a strategic partnership between the two companies, Movil would spread Mobli app among its users. Mobli is a developer of photo based social network, in which users can share their photos. Mobli announced last August reaching 10M users around the world. Mobli has long been an attraction for celebrity investors such as Leonardo Dicaprio, Lance Armstrong, Serena Williams and others. The main investor of the company since inception in 2009 has been a Kazakh investor Kenges Rakishev who invested \$20M from the total of \$28.5M invested in the company according to the company reports. The company has yet failed to show any income⁴⁴.

Jifiti, a developer of mobile apps, has announced the completion of a \$1M seed round. The current investor in the company Jesselson Group led the current funding round which joins an earlier investment in July of \$2.5M bringing the total amount raised to \$3.5M in the seed round. The company is planning an A stage funding round early in 2014. The application the company developed allows the users to send gifts to their friends providing the latter with an opportunity to choose color, style, size or even another gift. Another service the company provides is a platform for group purchases. The company currently focuses on the US market with a long list of well-known partners⁴⁵.

Lacoon Security, a developer of corporate IT security solutions, has completed a \$8M funding round led by Index Ventures together with Shlomo Kremer and Miki Budai who have already invested in the company before. The company has raised a total of \$10.5M since inception in 2011 by three cyber security specialists. The product of the company is a security platform for mobile phones based on the IOS or Android OS. The platform is designated to be used by corporate users for protecting their data.

⁴³ <http://www.geektime.co.il/zula-raises-second-seed-round-from-microsoft-ventures/>

⁴⁴ <http://www.themarket.com/technation/1.2158848>

⁴⁵ <http://www.geektime.co.il/jifiti-one-million-seed/>

IPO Pipeline

CyberArk, a cyber-security company, has started conversations with several investment banks in the US and is planning an IPO early in 2014. The company is contemplating to raise an estimated amount of \$100M-\$150M, bringing it to a valuation of \$500M. The current investors in the company include Goldman Sachs's Venture company, JVP and Vertex venture capital. As one of the primary investors of the company Goldman Sachs is believed to be a leading candidate to become an underwriter of the IPO⁴⁶.

Matomy, an Israeli digital advertising company, announced it would release a prospectus for an IPO on the London Stock Exchange by the yearend. The underwriters are UBS and Meryl Lynch-BOA and the planned IPO is set to raise \$150M. The company employs 450 people around the world, with 300 of them based in Israel⁴⁷.

Outbrain, (previously mentioned) a developer of tool for recommendations for content on the internet raised a pre-IPO round of \$35M. An assumption is that these funds will be used to increase the company market penetration and revenues leveraging its position before an IPO. According to the estimates in the Israeli market, Outbrain would go on an IPO next year with a valuation of \$1B⁴⁸.

⁴⁶ <http://www.globes.co.il/news/article.aspx?did=1000895726>

⁴⁷ <http://www.calcalist.co.il/internet/articles/0,7340,L-3613629,00.html>

⁴⁸ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615070,00.html>

M&A Deals during Q4

IT

Avaya, an American telecom equipment manufacturer, acquires the software department of Israeli ITNavigator for an estimated amount of tens of millions of dollars. ITNavigator was formed as an IT services company and the acquired department will stay as a standalone business unit with 50 employees⁴⁹.

Soluto, a developer of web based services for remote management and optimization of PCs and smartphones, has been acquired by Asurion, a US insurance company that specializes in Home electronics and cellphone insurances, for \$130M. Soluto would continue its operations and would continue to offer its services to existing and new users. This acquisition is Asurion's first in Israel and the company has decided that Soluto offices in Tel Aviv would become Asurion's R&D center, the first one outside the US. The investors of Soluto have been: IndexVentures, Bessemer Venture, Giza Partners, CrunchFund, Proxima Ventures and others who invested \$18M since it was founded in 2008 by Tomer Dvir and Yeshi Green. The company was first exposed when it won TechCrunch Disrupt in May 2010⁵⁰.

ZeroVM, a developer of a cloud based virtual server system, has been acquired by RackSpace, an American digital storage company. The full details of the deal haven't been announced, but as part of the deal the Tel Aviv offices of ZeroVM would become an Israeli R&D center of RockSpace. ZeroVM is the developer of the first Virtual machine monitor based on open code specifically designed for cloud platforms. The company's product allows developers to load only part of the operating system needed for the examination of the programs they need, allowing developers to create the test environment more rapidly. ZeroVM have been founded in 2011 as part of TechStars technology incubator with an initial seed investment of \$500K. The foundation of an Israeli R&D center of RockSpace is part of an extensive and noticeable trend of multinational companies acquiring Israeli startups which are later turned into R&D

⁴⁹ <http://www.themarker.com/technation/1.2130221>

⁵⁰ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615638,00.html>

bases in Israel. The latest examples of this trend are: Facebook acquisition of Onavo in October 2013, the acquisition of Soluto by Asurion also during October 2013 and NantWorks which acquired the DMS division of Alcatel-Lucent Israel^{51,52}.

Valinor, a consultancy in the field of SQL servers, has been acquired by Comm-IT, an Israeli software company, for an estimated amount of \$2.12M. Valinor was founded in 2005 and merged with First Priority during 2010. The merged company has grown and became a Microsoft golden partner, serving hundreds of customers around the world. Comm-IT is divided in to two operating units: a consulting unit and an IT division, among its customers are Cellcom, IBM, Comverse and Ceragon⁵³.

Medical Technologies

Innolap (changed its name to Bee Surgical) is a developer of surgical equipment for Laparoscopic surgery, which is a modern technic to perform an abdominal surgeries performed through a small incisions of 0.5cm-1.5cm⁵⁴. Innolap was acquired by American Teleflex Medical, a global supplier of medical devices. Teleflex acquired the company for an estimated amount of several million dollars. The company has been supported so far by the "Misgav technological incubator" from the Galilee. Innolap is the second company acquired by Teleflex in Israel, the other one is Eon Surgical which developed a similar device⁵⁵.

Activiews, a developer of devices used for Medical maneuvering within the lungs, has been acquired by Stryker, an American medical equipment company, for \$20M. The acquisition represents a \$10M profit on the \$10M which was invested in the company by 7Health fund. The device Activiews has developed is used for imaging lungs and collection of samples for biopsy. The acquisition of Activiews is Stryker's 3rd in Israel with Sightline acquisition in 2006 for \$150M and Surface Medical

⁵¹ <http://www.geektime.co.il/rackspace-acquires-israeli-zerovm/>

⁵² <http://www.themarker.com/technation/1.2156454>

⁵³ <http://www.geektime.co.il/comm-it-buys-valinor-for-7-5-milion-shekels>

⁵⁴ http://en.wikipedia.org/wiki/Laparoscopic_surgery

⁵⁵ <http://www.calcalist.co.il/internet/articles/0,7340,L-3613284,00.html>

last year for \$150M. Stryker closed the operations of Sightline two years after the acquisition⁵⁶.

Engineering

Warren Buffett's **Berkshire Hathaway Inc.** subsidiary, TTI announced it would acquire **Ray-Q** (which was mentioned in RVC Israeli ecosystem report as example of successful cooperation between Russian and Israeli companies), a consultant and distributor of electric systems for the defense and aerospace industries. Ray-Q employs 70 employees at its facility in Airport city; the company would continue its operation in Israel. Ray-Q was a distributor of Tyco Electronics, a Raychem division, for Israel, Turkey, eastern and part of central Europe and India. Ray-Q has become a standalone company in 2000 expanding its business from only distribution of electronic systems to design and consulting. The knowledge and expertise of Ray-Q would be used by TTI teams mainly in Asia and Europe according to TTI president of Europe and Asia operation. Ray-Q is not Berkshire's first acquisition in Israel, in 2006 Berkshire have acquired Iscar in two stages \$4B in 2006 for 80% of Iscar and the remaining 20% in May 2013 for \$2.1B. This is not the first acquisition of TTI in Israel either, in 2010 TTI have acquired Net-Eye, a developer of electrical systems, for several millions of dollars. TTI, a distributor of electronic components and semiconductors, have been acquired by Berkshire Hathaway in 2006. The company employs more than 3800 employees in more than 100 countries. The new integration of Ray-Q into TTI business would allow TTI to expend its areas of expertise to the defense market and planning of the electronic components. Yegal Pont Ray-Qs CEO would continue to serve as head of the Israel operation of TTI and expend TTI to new markets, based on Ray-Q business model⁵⁷.

NantWorks, an American semi-conductor company, has acquired the **multimedia solutions division of Alcatel-Lucent Israel** which would become Nant's R&D center in Israel. The division has been founded after the acquisition of Mobilitc by Alcatel-Lucent in 2006. Shay Hill the head of Alcatel DMS division would become VP at NantMobile. The DMS (digital media server) division would allow NantWorks to engage in a

⁵⁶ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615039,00.html>

⁵⁷ <http://www.calcalist.co.il/local/articles/0,7340,L-3613524,00.html>

wider range of services than the current focus on CSP. NantWorks (communication service provider) was founded by Dr. Patrick Soon-Shiong in 2011 with a main focus on converging ultra-low power semiconductor technology, supercomputing, augmented intelligence, high performance networks for use in medical and entertainment. NantWorks has a number of subsidiaries such as: NantHealth, NantOmics and NantMobile⁵⁸.

PrimeSense, a developer of 3D motion sensors, has come to a preliminary agreement with Apple for the acquisition of PrimeSense for \$345M. Until this day \$85M has been invested in PrimeSense by large VC funds such as Canaan Partners Global, Gemini Israel and Genesis Partners, each getting a return of \$70M-\$80M on an investment of \$15M-\$20M. The technology of PrimeSense has been implemented in more than 20M devices around the world, mainly used in the Kinect of Microsoft's Xbox360. Apple is one of the most active multinationals who operate R&D centers in Israel, with 400 employees in 3 development centers starting after the acquisition of Anobit in the beginning of 2012. The technology of PrimeSense will be used in the development of Apple media services and mainly in the development of an Apple smart Television^{59,60}.

Alvarion is a point to multi point communication equipment developer and producer. Court approved the sale of the company to "Valley Telecom" for \$37M, Valley Telecom is a developer of core and value added services for the telecommunication market. The sale came because of Alvarion filing a chapter 11 after a few years of struggle. The communication equipment manufacturers market in Israel, once the pride of the local high-tech industry with multinational companies such as: Ceragon Networks, ECI and Alvarion have been struggling for last 5 years due to strong competition⁶¹.

⁵⁸ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615986,00.html>

⁵⁹ <http://www.calcalist.co.il/internet/articles/0,7340,L-3617082,00.html>

⁶⁰ <http://www.themarket.com/technation/1.2173797>

⁶¹ <http://www.globes.co.il/news/article.aspx?did=1000882078#fromelem>
[ent=hp_morearticles](#)

Mobile

For Each, an Israeli Mobile Apps development company, has been acquired by AutoDesk, a software company specializing in 3D design software. AutoDesk would pay an estimated amount of \$15M for the company, whose employees would join AutoDesk's development center in Tel Aviv. This is the second acquisition of Autodesk in Israel. In 2009 Autodesk acquired Planplatform for an estimated amount of \$20-\$30M⁶².

Onavo, an Israeli mobile technology services developer and provider, has been acquired by Facebook for an estimated amount of \$150M-\$200M. Onavo was founded in 2009 by Guy Rosen and Roy Tiger, the company developed a cloud based technology for compression of mobile data, which have been used by common apps such as Facebook and Google maps. Recently the company has developed another source of income by using the data stored in its servers and monitoring app's usage for research purposes. The main investors in Onavo are Sequoia capital, Horizons capital (held by Li Ka Shing), Magma capital and Motorola Mobility totaling in an investment of \$13M over the 3.5 year life span of the company. This acquisition is Facebook's 3rd in Israel, with Snaptu, which developed a technology to run apps on simple phones acquired in 2011 for \$70M and Face.com, which developed a face recognition technology, which was acquired in 2012 for \$100M. Facebook would use Onavo's technology as part of its new strategy to bring internet to the 3rd world countries which don't have internet access today⁶³.

⁶² <http://www.themarket.com/technation/1.2139115>

⁶³ http://www.globes.co.il/news/article.aspx?did=1000885379#fromelem_ent=hp_daily_news

Investment and Venture Capital in Israel

Li Ka Shing fund donated \$130M to the Haifa Institute of Technology (Technion) the second stage of the donation would be a donation of \$147M in order to build a joint technological institute TGIT of the Technion and the University of Shantau in China. The donation is part of 20 years' plan in order to improve China's technological education. The Chinese cooperation with the Technion is the second in Israel, Tel Aviv University recently announced the establishment of a joint research institute with university of Chingwoa, specializing in nanotechnology. In parallel to the research center, the two universities announced the foundation of a \$16M fund, which would finance the inventions developed in the center. Li Ka Shing and his company Horizons ventures have been deeply involved in the Israeli high tech and agro tech markets. Horizons over the last 3 years Horizons have invested in many companies, the most noticeable is Waze, a mobile navigation app developer which was sold to Google for \$1.1B other companies are: Kaiima, an agro tech company who developed a method to increase crops yield. Invi, a developer of chat app that turns links into icons, and many others. Horizons Ventures specializes in early to middle stage investments, mainly in the technology, telecom, internet, media, education, health care fields and more⁶⁴.

Pitango raised new \$270 mn fund. Pitango is the Largest VC in Israel and one of the first, running strong since 1993 lead by Rami Kalish, Nechemia (Chemi) Peres (the founders). Pitango has \$1.4B under management and has invested in 120 companies. The latest fund is the smallest one in Pitango's History and it is part of a larger trend of a decrease in amounts raised by VC funds in Israel. Pitango invests in early, expansion and late stage companies in the fields of Communications, Wireless, Networking & Storage, Cellular and Mobile technologies, Enterprise Software, Internet and Media, Healthcare & Life Sciences, and Clean Technologies. This fund is the 6th fund of Pitango and it has been running since 2012. Since the foundation the fund has

⁶⁴ <http://www.globes.co.il/news/article.aspx?did=1000881405>

invested in the following companies: Taboola, Magenta Medical, JethroData, SalesPredict, Ubimo, Revizer⁶⁵.

Samsung, the Korean electronics giant, has announced it would increase its investment in the local development center, and it would start a new business incubator destined to open in 2014 Q1 and would be Samsung's first incubator in the world. Samsung currently has 250 employees in its Israeli development center. As part of its innovation program Samsung have started a \$100M fund (Samsung Catalyst fund) which would now begin investing in Israeli companies as well. The new fund's first investment in Israel is Mantis Vision, specializing in 3D mobile photography⁶⁶.

The announcement comes as part of a more extensive trend of East Asian funds and investors. Two major acquisitions in the recent past were the acquisition of 60% of Macteshim Agan, an agrochemicals' manufacturer and distributor, by ChemChina, and the acquisition of Alma Lasers, an esthetics medical lasers company, by Chinese Foson for \$240M⁶⁷. Ho Ming the Chinese economic and commercial council said, many Chinese companies were looking to establish R&D centers in Israel and acquire Israeli companies⁶⁸. SingTel, a Singaporean telecom company which services more than 460M customers and \$14.97B revenues and \$3.17B, and Amdocs, a developer of CRM and billing software, have founded a joint R&D center in Israel in March 2013. The new R&D center would focus on face and voice recognition technologies, as well as technologies which would improve the efficiency of Wi-Fi and cell networks. SingTel investment in the Israeli market won't stop at the foundation of the joint R&D center; the company is planning to invest in Israeli companies from 3 main sectors:

1. Young startup companies that would allow or contribute to future developments of SingTel products. The investment would be executed by joint ventures or by equity acquisitions.

⁶⁵ <http://www.pitango.com/about.asp>

⁶⁶ <http://www.chiportal.co.il/main-news/42-2009-12-11-17-38-45/3004-samsung-consider-buying-two-israeli-companies-1010134>

⁶⁷ <http://www.pc.co.il/?p=128270>

⁶⁸ <http://www.pc.co.il/?p=112109>

2. Joint work with universities by funding of research and commercialization of the technology developed as part of SingTel services in its operations.

3. Cooperation with Israeli developers and business angels in order to find new attractive technologies developed by Israeli companies.

The investment would be done partly by Innov8 fund, which was raised by SingTel in 2010 with an initial fund raise of 200M Singaporean dollars (close to \$161M)⁶⁹.

Lionbird VC has completed a \$20M fund raising destined to be invested in 20-25 Israeli companies in the Seed or A series funding rounds. Lionbird is an Israeli-American VC led by Yitzhak Fridman, Ed Michael and Haim Fridman. Lionbird plans to leverage its connections in the American technology market to help its portfolio companies create corporation with US tech companies. This funding round is the first funding round of the new VC⁷⁰.

Eden Bar Tal and Pinchas Buchris the former CEOs of the Ministries of the Communication and Defense, are contemplating the foundation of \$120M VC fund which would invest in high-tech companies in the fields of IT, Data protection, cloud based computing and more. Bucris has served as the CEO of Israel's Ministry of Defense and the commander of 8200 unit. Bar Tal used to be a partner in Cukierman investment house and the founder of EBT investment, before becoming the CEO of Israel's Ministry of Communication for the last 4 years⁷¹.

The investments made by the VC market during the **3rd quarter of 2013** in Israel have reached a 13 year peak (last seen during 2000). The data was reported by KPMG and IVC in their survey concerning the High-Tech funding in Israel. The total amount raised by startups in Israel during Q3 2013 was \$660M raised by 162 startup companies, a rise of 34% compared to Q2 2013 and 35% compared to Q3 2012. The main growth can be seen in the mid stage investments mainly in the Internet and software fields. At the same time there is a trend of decline in seed investment market which shrunk by 37% compared to Q2 2013 and 60% compared to Q3 2012, with only \$17M being raised by 25 companies.

⁶⁹ <http://www.themarker.com/technation/1.2136806>

⁷⁰ <http://www.geektime.co.il/lionbird-raises-20-million-dollars-fund/>

⁷¹ <http://www.calcalist.co.il/internet/articles/0,7340,L-3614204,00.html>

Due to the investment in more mature companies, an amount of \$165M was raised just by 5 companies each raising more than \$20M. A noticeable trend this quarter was the reduction of the market share of the Israeli VC's, to just 23% of the total amount raised which is lowest in a decade. The investments in Internet companies have peaked with \$179M being raised by 47 companies, an increase of 180% compared to Q3 2012 and a record high since the year 2000^{72,73}.

According to a survey of VCs in 21 countries done by **Deloitte**. In Israel half of the VC investors believe the trend of growth in capital raising would continue until the end of the year and probably to the beginning of next year. Another noticeable result is the level of confidence of investors in the high-tech industry, which is the second highest in the world, close after the United States. According to Tal Hen the leader of Deloitte's high-tech department: the decline in seed investment is not the result of a change of preferences of the investors, but the effect of the VC's search for a quick exit due to the funds maturity. (Most of them raised in 2008-2009)⁷⁴.

Catalyst VC (founded by Edouard Cukierman) and China Everbright, an Hong Kong based investment company, are raising \$200M for a new fund which would invest in Israeli companies which are interested entering the Chinese market. So far China Everbright have secured an investment of \$75M to the new fund allowing it to begin investing, mainly in later stage investments in well based companies. The new fund would have 6 partners, 3 Israeli and 3 Chinese which would focus on investing in Agro tech, Energy, medical, water related and communication companies. China Everbright is an investment company managing 12 funds totaling in \$4B. The company is traded on the Hong Kong stock market⁷⁵.

According to a survey done by **BDO Israel** 63% of the startup entrepreneurs don't believe their company would exceed the \$100M hurdle, in the same time they won't agree to a premature exit. Although 2013 haven't been a record year in the number of exits, it was

⁷² http://www.deloitte.com/assets/DcomUnitedStates/Local%20Assets/Documents/TMT_us_tmt/us_tmt_2013VCSurvey_081313.pdf

⁷³ <http://www.globes.co.il/news/article.aspx?did=1000885963>

⁷⁴ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615022,00.html>

⁷⁵ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615724,00.html>

characterized by large exits of mobile and IT companies. The survey also states that the exits in the current year have induced a positive business climate, especially among Mobile and IT companies⁷⁶.

JVP Fund, a Jerusalem based VC, is starting a fundraising process with a target of raising \$120M for its 7th fund. The fund will focus on early stage investments in the fields of digital Media, communication, internet, storage technologies and cyber security. JVP fund have been founded in 1993 and since have become one of the most active funds in Israel, with more than \$1B invested in about 100 companies. The fund's portfolio includes 26 exits and 11 IPOs on NASDAQ, the most notable is the acquisition of Chromatis Networks in 2000 by Lucent, a communication company which later merged with Alcatel, for \$4.82B. The information of the new fund came from JVP SEC filling⁷⁷. JVP operates 2 technological incubators JVP Media Labs and JVP Cyber Labs, investing in seed stage companies⁷⁸.

Blumberg capital has announced the completion of a \$150M funding round for its 3rd fund, Higher by \$50M than what the fund was initially aiming for, due to high demand. According to the founder of Blumberg Capital David Blumberg, the current fund will invest 40%-45% of the fund in Israeli companies compared to 30% in Blumberg's previous fund. Blumberg investments in the Israeli market would be mainly in the fields of IT security, social networks, financial programs and virtualization looking to expand to the US market and in particular to Silicon Valley and New York City. Blumberg is a sort of outlier of the VC market in the vast investments in the seed funding stage, later investing in advanced investment stages of the companies it has initially supported⁷⁹.

Israeli VCs are **struggling to raise funds for investment** in the Israeli technological market, although scoring high yields in the last year due to the last seen exits mainly in mobile market. Although Israeli high-tech companies have shown good returns this year, the part of Israeli VC and private equity companies have decreased mainly to Chinese and other East Asian (mainly south Korean) funds. Israeli technological

⁷⁶ <http://www.calcalist.co.il/internet/articles/0,7340,L-3615483,00.html>

⁷⁷ http://www.sec.gov/Archives/edgar/data/1590217/000159021713000001/xslFormDX01/primary_doc.xml

⁷⁸ <http://www.themarket.com/technation/1.2155424>

⁷⁹ <http://www.calcalist.co.il/internet/articles/0,7340,L-3616294,00.html>

companies have raised a total of \$2.2B this year compared to \$1.9B last year, accordingly the sum of exits by Israeli companies this year was \$4.9B compared to \$2.8B last year. The vast majority of exits in the Israeli market are done in the form of M&A deal (93%) with only a minor portion done by IPOs, unlike the US market. The trend of the decline of the Israeli VC market can be traced by the decrease in the number of Israeli VCs from 50 in 2005 to 27 this year. Today 73% of the investors in the Israeli market are not from Israeli origin, the main challenge of the Israeli high tech industry in the upcoming years would be to attract non Israeli funds to invest in early stage investments, a niche which non Israeli VCs are reluctant to invest these days. One of the main reasons for the decrease in Israeli investments is the fact Israeli institutional investors are not investing directly in the high-tech market and have decreased the amount allocated to the VC market. In many cases even though the VC is Israeli its money was raised mainly from US and European investors⁸⁰.

GE has founded an Israeli cyber development center, the center as called Cybersecurity Lab have been secretly incepted in last few months. The center currently employs 10 people with a prospect of growing and expanding its operations. The new center is part of a growing market of Israeli cyber R&D centers incepted or acquired by large multinationals, with IBM acquisition of Trusteer and an announcement of Cisco Israel of recruiting in an extant of 100 employees to start a cyber-security R&D center. This investment in an Israeli R&D center is not the first done by GE, since the foundation of GE technological center in Israel at 2008 many collaborations with Israeli companies were made with \$300M invested Israeli technologies since 2011 and 8 GE facilities active to date. A great part of GE activity in Israel is the search for companies to invest in with 6 major deals since 1998 including: a number of divisions of Elscint acquired for \$370M, IDX acquired for \$1.2B and more⁸¹.

Eric BenHamou former CEO of 3Com and Palm is going on a raising round for his 2nd fund with an aim of raising \$70M for investments in startups in Israel and outside of it. The fund would invest close to a third in Israeli companies in the fields of cloud based enterprise software, Cyber protection and mobile technologies. BenHamou's personal wealth is

⁸⁰ <http://www.themarket.com/technation/1.2164326>

⁸¹ <http://www.calcalist.co.il/internet/articles/0,7340,L-3617018,00.html>

estimated in a few hundreds of millions of dollars mostly from the sale of 3COM and PALM to HP. BenHamou started his connection with investments with the foundation of BGV (BenHamou Global Ventures) during 2003 raising \$35M which were invested in the technological sector in Israel⁸².

⁸² <http://www.calcalist.co.il/internet/articles/0,7340,L-3617091,00.html>

Technologies

IT

SalesPredict, a company that created a Salesforce based big data technology for rating of business opportunities based on analysis of the customer's previous purchases. The analysis is done based on social networks and information found on websites, the information is then translated into a score, which is delivered to the salesperson/negotiator. The company has been founded by Yaron Zaky OR and Kira Radinsky who has been named by MIT as one of the world's most promising entrepreneurs under 35. The company have recently completed a funding round of \$1M from Pitango VC ,AfterDox and RSL Venture Partners⁸³.

Talking Layers, an Israeli start up, has developed a platform for interest based social interaction tool on relevant websites. The company allows web page owners to develop a social community in their web site, focusing on the content of the specific site. The platform allows writing comments, chatting, viewing other users' profiles and commenting on the content of the web page. The company has recently got an early stage investment from Wadi Ventures, an Israeli VC which specializes in early stage investments⁸⁴.

Medical Technologies

Elium Medical got an approval from the American patent office for its WIRION system, which is used to protect against Blood clots that are being generated during catheterization. The system itself is a filtering device which is used in balloon based Catheterization. The company got approval for the marketing of the system in EU and preforms clinical trials towards FDA approval⁸⁵.

Vascular Dynamics, a developer of an implant which is used to impact blood pressure, have begun FDA clinical trials in 4 medical centers

⁸³ <http://www.geektime.co.il/salespredict-will-predict-your-next-sale-geektime-conference/>

⁸⁴ <http://www.geektime.co.il/talking-layers-add-social-layers-to-your-site/>

⁸⁵ <http://www.calcalist.co.il/markets/articles/0,7340,L-3613385,00.html>

in the US and EU. Vascular Dynamics have been founded in 2008 by Rainbow medical. The implant is inserted in to the artery who leads blood to the brain with sensors connected to the nerve system influencing the cardiac output and the blood pressure. The blood pressure treatment market is estimated in billions of dollars, with more than 10M patients only in the USA⁸⁶.

Realview Imaging and Philips have announced the completion of a joint clinical trial of RealViews product. RealView have created, using imaging technologies, a tool which creates a real time hologram of a patient heart “floating” in front the surgeon’s eyes during surgery. The device will allow surgeons to examine the heart from all directions and see the real time implications of their actions, this instead of the 2D imaging tools available today. RealView was founded in 2008 and has since then raised several of millions of dollars from a Shimon Eckhouse, the founder of NASDAQ traded Syneron medical. The clinical trials have been held in Shneider children hospital in Israel along with Philips, which is interested in use of its imaging devices along with RealViews system⁸⁷.

Mobile

Anagog an Israeli startup company that developed a new technology for recognition of vacant parking spaces. In order to find parking spaces the company uses an automated algorithm which recognizes when parking spaces become vacant using the user’s smartphone. The company has also announced its cooperation with Parx, the owners of Easy Park, a major parking service provider in Israel⁸⁸.

GingeeGames have Developed a mobile application development platform which can be used across platforms (Android, IOS) almost without losing performance, (about 4%) this way the developer can reach all the platforms with a single code. The company has been founded in 2011 by Roe Livne. In March 2013 the company got its major funding of \$1.2M from British private investors⁸⁹.

⁸⁶ <http://www.calcalist.co.il/internet/articles/0,7340,L-3614171,00.html>

⁸⁷ <http://www.globes.co.il/news/article.aspx?did=1000891515>

⁸⁸ <http://www.geektime.co.il/anagog-brings-crowd-sourcing-to-parking/>

⁸⁹ <http://www.geektime.co.il/gingeegames-will-help-you-build-cross-platform-app/>

Travee, a VoIP app developer, has developed a VoIP app that lets travelers make and receive calls using their regular phone number. The app allows avoiding the trouble of remembering a temporary phone number or alerting callers from calling to avoid superfluous costs. The company would offer free reception of calls and low cost outgoing calls, the only problem with the app is the need to connect to the internet via mobile data connection or Wi-Fi⁹⁰.

⁹⁰ <http://www.geektime.co.il/travee-keep-your-number-while-abroad/>

Significant trade transaction and other related headlines

IT

NokNok an Israeli mobile app development company, which developed an app used to make calls over IP. The company has announced that their app is to be included in Nokia phones. Some doubt about the future of the deal rose after the purchase of Nokia by Microsoft, and Microsoft being the owner of Skype, but Idan Bachar the CEO of NokNok believes the new development won't hurt NokNok's collaboration with Nokia⁹¹.

Google has announced the termination of the contract with Babylon, a creator of a translation software and toolbar, since the announcement Babylon stock have fallen by 65%. The contract with Google, which accounted for 43% of Babylon income was to be renewed during November. The reason Google initiated the termination of the contract was the problematic process of removal of Babylon's toolbar which created aggravation among users. The termination of the contract with Google might be followed by Yahoo taking the same measure, as for now the contract with Yahoo is suspended. According to estimates in the market, the steps taken by Google and Yahoo might be a sign of final decline in the toolbar (download) market. The decline began when last year Google has ordered the developers of toolbars to have an active approval for the installation of toolbars cutting the income of toolbar companies by close to 80%. The Toolbar development market have been one of Israel's fastest growing high-tech sectors, with companies such as Conduit, Babylon, Perion and many others. The future of the sector nicknamed "Download Valley" lies in uncertainty due to the recent developments^{92,93}.

Amazon has announced it would establish a service sales and services center for its cloud based services in Tel Aviv (a AWS). This

⁹¹ <http://www.geektime.co.il/will-nokia-collaborate-with-the-israeli-noknok/>

⁹² <http://www.calcalist.co.il/internet/articles/0,7340,L-3615698,00.html>

⁹³ <http://www.themarket.com/technation/1.2102653>

would be the first formal representation of Amazons in Israel, although Amazon has many customers in Israel, mainly in the high-tech industry⁹⁴.

IBC, an Israeli supplier of fiber optics infrastructure services, has announced the prices for its services. The price of 100MB would be \$28,5. The customers of the services of the company would be communication companies (currently mostly in the telecom industry) which supply added value services such as Internet, TV and phone services, based on IBC's infrastructure. Until now the infrastructure market included only two companies Bezeq and Hot, IBC offers its services in a price 26% lower than the current market price. The company would start supplying its services in Q1 2014⁹⁵.

Oracle senior executives have arrived to Israel to check disorderly conduct in the Israeli branch of the company. The checking process has taken place at local distributors and customers of Oracle. It's yet uncertain what the consequences of the checkup would be, but according to rumors in the company it might lead to the termination of the employment of senior executives in the local branch⁹⁶.

Mimoona, a crowdfunding Israeli startup, has developed a unique product for the fashion market. The fashion market needs a way to forecast future trends in the "public taste" in clothing, this information would allow companies to reduce costs and increase revenues. The new platform would allow designers to showcase their future products, allowing the public to purchase the products before they are produced, if enough people would buy the design. Focusing of the production would allow the designers to save the money invested into unsuccessful product lines⁹⁷.

According to rumors in the IT market in Israel, **Ness Israel**, an IT company, is to be offered for sale. Two years after Ness has been acquired for \$307M by CVC Private Equity, a subsidiary of Citibank, CVC is to split Ness's Israel operations and the global operation according to market estimates. The estimates are explained by the reappointment of Ness's previous Chairman and a group of CVC representatives arriving to

⁹⁴ <http://www.calcalist.co.il/internet/articles/0,7340,L-3614348,00.html>

⁹⁵ <http://www.themarket.com/technation/1.2140784>

⁹⁶ <http://www.calcalist.co.il/internet/articles/0,7340,L-3614718,00.html>

⁹⁷ <http://www.geektime.co.il/mimoona-crowd-funding-in-fashion/>

Israel. Ness's official response is that the company is not going on the market any time soon⁹⁸.

Mobile

Israelis are the most intense users and developers of mobile applications. According to a survey done for the Israeli export commission, in Israel there are 1500 mobile developers in Israel and they are responsible for one in 200 apps globally. Another finding is that the average Israeli uses mobile applications for 80 minutes a day, which is a world record⁹⁹.

BioTech

Teva the Israeli pharmaceuticals giant announced a streamlining process in which 5000 employees (10% of the employees) would be let go, 800 of which in Israel. The process is aimed to increase the company efficiency, and improve its financials after Teva lost fifth of its value in the last 3 years. As a result from the announcement Teva's stock gained 2%. The streamlining process was followed by the departure of Teva's CEO, Dr Jeremy Levin, on October 30th, Levin would be replaced by the company's CFO Eyal Desheh^{100, 101}.

Biocpanel, a R&D company for Bladder cancer treatment, have announced of halt of the research process of its BC-819 medicine, in order to find other implications of it. The company would proceed with the development of its BC-821 medicine and the BC-819 only for the treatment of bladder cancer¹⁰².

⁹⁸ <http://www.globes.co.il/news/article.aspx?did=1000890388>

⁹⁹ <http://www.calcalist.co.il/internet/articles/0,7340,L-3613346,00.html>

¹⁰⁰ <http://www.themarket.com/markets/1.2137504>

¹⁰¹ <http://www.themarket.com/markets/1.2152848>

¹⁰² http://www.globes.co.il/news/article.aspx?did=1000886939#fromelement=hp_folders_585

Companies of special interest

Vintec Knowledge, an Israeli company that is part of a UK based group, is a developer of unique LED technologies that allows reduction of electricity consumption by 70%-90%, with 140 Lum/Watt compared to the 131 previous records and an average of 50-80 Lum/Watt. The estimated life expectancy of the company's LED is 8-15 year compared to 3 years for the usual LED lights. Combined with a wireless controlling technology the company has created a street lighting product that uses the fixture of the pole for cooling and as an antenna. The company has developed a special fog technique in which the light detects the fog conditions and adjusts the light so the reflection from the fog is minimized. The company allows access to operation program of the light from a web and mobile platforms, allowing mobility and no administration.

MedAware, a Healthcare IT company, the company develops a software solution that identifies prescription error and prevents them in real time. Prescription errors cause an estimated 50,000 deaths a year only in the US, with a great direct cost. The company has developed a software solution that by using big data analytics allows identifying prescription outliers by learning how real life scenarios are managed by physicians. The developed software allows identifying life threatening prescription errors which endangered about 1% of the population and were associated with mortality, longer hospitalization and readmissions to the hospital. The current solution on the market are focused on drug to drug interaction, allergies, dosage outliers and demographic contraindication, delivering poor results (less than 10% precision rate) of identifying errors and not supporting drug patient mix-up problems. The company so far has conducted a large scale study on over 400,000 patients and is currently working towards its first live deployment. The company focuses on the clinical information market, with more than \$5B/year medical liability costs only in the US the solution the company provides can be of special interest to medical insurers. The company team includes the CEO Shlomzion Shen, a PhD in molecular biology, who used to serve as CEO of Fluonic, Director of business development of Protalix and more. Gidi Stein MD PhD, serves as CMO of the company, his previous experience includes being deputy head of internal medicine department in Rabin Medical center.