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HIGH TECH

IN ISRAEL

FLANDERS INVESTMENT & TRADE MARKET SURVEY



High Tech in Israel- An Overview

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INTRODUCTION

Israel has received a lot of attention in recent years for its strength in high tech industries. Dubbing the nicknames of “Silicon Wadi” and “The Startup Nation,” Israel has established a reputation for high tech and entrepreneurship. Over the course of the nation’s history, several inventions such as voicemail and the USB stick have transformed global industries, and since the ‘90s there has been an influx of capital and investments. High-tech and startups have been integrated into an Israeli culture that prides itself on innovation.

START UP & INNOVATION

Israel has the most startups as a percentage of population in the world—nearly 1,000 new firms per year despite a population around 8 million. According to [Reuters](#), the nation leads the world in R&D spending as a percentage of GDP—4.3% being nearly twice the OECD average of 2.4%. According to the Israel Venture Capital Research Center “there are 282 R&D centres in Israel, most owned by foreign firms. Eight out of 10 Israeli technology firms bought by multinationals become a foreign R&D centre in Israel, or are integrated in existing foreign R&D centres.” In 1991, the Office of the Chief Scientist of the Ministry of Industry, Trade and Labor established the [Technological Incubators Program](#). Currently, they are involved with 22 technological incubators located around Israel, some of which are listed [here](#). Generally, the incubation provides funding between \$500,000 and \$800,000. Between 1991 and 2013, over \$730 million was invested in over 1,900 companies. Over 1,600 of these companies completed the incubation phase, of which 60% went on to raise private investment—aggregating over \$4 billion from [the private sector](#).

The [Israeli Advanced Technology Industries](#) (IATI) also assists in high-tech development. They have over 500 members involved in all stages of high-tech. Their website lists 20 [accelerators](#), 31 [incubators](#), and 110 [investors](#), among other organizations. This vast network has been very successful in transforming start-up ideas into well-funded actions. 406 medical device companies are currently [listed](#) on their site and benefit from this network.

INVESTMENTS

According to Deloitte, international venture capitalists have greater confidence in Israeli startups than in any other nation in the world besides the United States. Overall, Israeli startups saw an aggregate of \$3.4 billion in capital funding and \$7 billion in exits in 2014. Most venture capital funding—about 80%—is coming from foreign investors. Israel ranks first in the world in venture capital funding per capita.

[Jerusalem Venture Partners](#) (JVP) is among Israel’s leading investors, currently managing over \$900 million. [JVP Cyber Labs](#) specifically works with cybersecurity and big data. They are currently interested in “APT detection and prevention, mobile/BYOD, Cloud and DB Security, Identification, Industrial Internet, M2M, Big-data analytics, next-gen FW/IDS/IPS, End-point security and more.” [JVP Media Labs](#) specifically works with digital media technologies, mobile solutions, enterprise software, storage and cybersecurity. It provides “seed financing, hands-on management, office space and strategic guidance.”

In 2012, [OrbiMed Israel Partners LP](#) (a joint venture between [OrbiMed](#) and the Israeli government) created a \$222 million fund to invest in life sciences innovation. Biotechnology and medical

device companies are eligible at varying stages of maturity, from seed funding to commercial growth equity. Companies benefit from funding, as well as the operating, scientific, and business expertise of OrbiMed.

There is also a significant amount of foreign acquisition and R&D in Israel. Google, IBM, Citigroup, Barclays, Microsoft, and Facebook are among numerous companies that have been investing in R&D in Israel. In 2014, Intel invested \$6 billion in their Kiryat Gat chip plant—the largest Israeli technology investment ever.

SECTORS TO WATCH

Some of the leading high tech scenes in Israel are in automotive, cybersecurity, Internet of Things, big data, and financial technology industries.

AUTOMOTIVE

Despite not having a substantial automobile industry, Israel is a growing power in automotive technology. High tech is becoming increasingly applicable to automobiles, and companies such as BMW, Fiat, and Toyota have been taking on R&D initiatives in Israel. In 2014, Mobileye had the largest IPO in Israel's history, raising \$890 million with an initial market value of \$7.6 billion. While transportation becomes more automated in the coming years—already, companies such as Google and Toyota are developing self-driving cars—Israel will be developing technology to advance this sector.

In addition, it is worth noting that recently, [EcoMotion](#) was created. It is a joint venture that “is building an interdisciplinary community focused on Smart Transportation, stimulating multiple solutions in R&D and entrepreneurship, and developing Smart Transportation”.

CYBERSECURITY

The 2013 IMD World Competitiveness Rankings put Israel at #1 for cybersecurity, and companies are continuing to advance this industry. According to the IVC Research Center, over 100 new cybersecurity companies have emerged in Israel within the last 4 years. Seventy-eight of them have raised nearly \$400 million of investment. The year 2014 saw over 220 local companies as well as 20 foreign R&D centers working on solutions to be applied throughout the world. IBM, Cisco, and General Electric are among companies establishing major cyber centers in Israel, [according to the Israel Ministry of Economy](#). Because of growing demand and in order to gain from the growing potential of this sector, it has been decided to establish [a cybersecurity hub](#) in the south of Israel. It will develop new technologies and solutions and will be adjacent to other institutions that are dealing in this subject matter.

INTERNET OF THINGS

By 2020, it is estimated that 25-75 billion “things” will be connected to the Internet—a substantial increase from the 0.9 billion recorded in 2009. [Several Israeli companies](#) are dealing with this growing industry. The main investors are Jerusalem Venture Partners, Qualcomm Venture Israel, Intel Capital Israel, Deutsche Telekom, and GKI Group.

BIG DATA

The amount of data in the world is increasing exponentially; cloud computing, the Internet of Things, and other developments are all contributing to an emerging world of data. Companies are positioning themselves to capitalize on this changing landscape, and many are looking to Israel for big data analytics. Large corporations such as Amdocs, Hewlett-Packard, Intel, SAP, Citibank, and LivePerson all have [a presence in Israel, advancing their big data technology](#).

MEDICAL TECHNOLOGY

Medical technology has always been a strong sector of the Israeli economy, and it has continued to grow rapidly for many years. In 1996, there were 186 life sciences companies—as of 2014 there are approximately 1,000. [According to the Israel Ministry of Economy](#), 41% of all life sciences companies operating in Israel today were established during the last 10 years and over 1/3 of all sector start-ups are already generating revenue. As of 2009, Israel ranks first in the world for number of medical device patents per capita.

FINANCIAL TECHNOLOGY

The financial technology industry in Israel is currently comprised of approximately 200 companies, from small startups to large international corporations. The current strengths of this industry include cyber & information security, finance, mobile innovation, storage & big data, trading, and IT services. A lot of the innovation in [this industry](#) stems from significant R&D expenditures in network and data security by the Israeli Defense Forces. Additionally, Israeli financial institutions are often among the first to adopt new data storage security measures.

TRENDS

The Office of the Chief Scientist released the [First Annual Innovation Report](#) in 2015. One of the major findings was that Israel has established itself as a major hub for startups, research, and development, but is struggling to establish mature technology firms. Israel has a high rate of startups and quick exits. “Israeli venture capital-backed companies take an average of 3.95 years from the first round of funding to acquisition, compared with 6.41 years in Britain and 6.66 in France, according to third-quarter 2014 figures from Dow Jones VentureSource.” Usually, as a result, R&D remains in Israel, but sales and logistics are transferred elsewhere. The Office of the Chief Scientist plans to incentivize companies to continue their growth in Israel, but it is currently a nation of startups, exits, and R&D.

Among other issues mentioned in the report, there is a lack of personnel (specifically engineers and technicians). Also, despite the large amounts of venture capital funding, “bigger bets” strategies have resulted in larger sums of funding being available to fewer (supposedly more promising) companies. They estimate a Round A funding gap around \$100-200 million. Alternatives are beginning to emerge, such as crowdfunding and micro-VC (funds that focus on early-stages).

Despite these issues, Israel’s high-tech industry is continuing to grow. Beer Sheva’s new [Advanced Technology Park](#) is poised to become Israel’s high-tech capital in the coming years. A

January study by Brandeis International Business School and T3 Consulting group ranked Beer Sheva as “first out of seven global cities forecast to emerge as important high-tech centers.” The complex will eventually hold 15 buildings and 10,000 employees. As of March there are only 2 buildings and 1,000 employees, but it has already led to PayPal’s acquisition of \$60 million CyActive. The Advanced Technology Park, although less than two years old, will aim to turn Be’er Sheva into an internationally recognized high-tech location.

CONCLUSION

Israel has established a reputation for high-tech innovation which has put it among the world’s most advanced nations. A highly educated population, along with a culture that celebrates startups and technology, has resulted in a booming high-tech sector. Israel is a popular location for foreign multinationals to invest through venture capital, acquire a growing Israeli startup, or spend on research and development. As high-tech becomes increasingly prominent in the global economy, Israeli businesses and policymakers are hoping to help Israel maintain its high-tech status. New forms of fundraising emerging for young startups will also be of importance. In addition, developments in automotive, cybersecurity, Internet of Things, big data, and financial technology will be particularly interesting to watch.

Given the current “startup and exit” mentality in Israel, it would be wise to seek out synergy with Israeli companies. Despite the heavy concentration of high-tech innovation in Israel, the fact remains that it is a small country and can benefit greatly from Flemish products, technologies, and services that will streamline and improve their output. There are several companies interested in importing and distributing products in Israel, serving as a representative for Flemish companies. Additionally, Israeli companies in various sectors are interested in getting technologies and solutions that will streamline and improve their output. They may also be interested in joint ventures and projects with their Flemish counterparts toward projects in Israel or abroad.

Flanders investment & Trade informeert u over economische relevante activiteiten in potentiële exportmarkten. Deze informatie mag nooit geïnterpreteerd worden als indirecte steun van de (geo)politieke standpunten van overheden waar ook ter wereld.

Specifiek voor Israël volgt Flanders Investment & Trade de EU-standpunten ter zake:

<http://diplomatie.belgium.be/nl/businessguidelines.jsp>