

Introduction
Israeli Ecosystem

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Prepared for Hyundai Motors, Cradle Tel Aviv



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Technology disruption is the key driver behind value creation

Top 5

US companies by Market cap
are now technology companies

2007



ExxonMobil



2019



amazon



Source: BACI International Trade Database

What is Israel inventing

Examples of Israeli innovation



<https://www.youtube.com/watch?v=J7xIBoPr83A>

Israel is one of the two leading tech ecosystems worldwide



Silicon valley

\$25B invested

- Internet
- Consumer (B2C)
- Product
- Extensive technologies
- R&D + Marketing/Sales

>16,000 Startups

Israel

\$5.2B invested

- Deep Technologies
- Business (B2B)
- Machine Vision
- Cyber
- R&D

>6,000 Startups

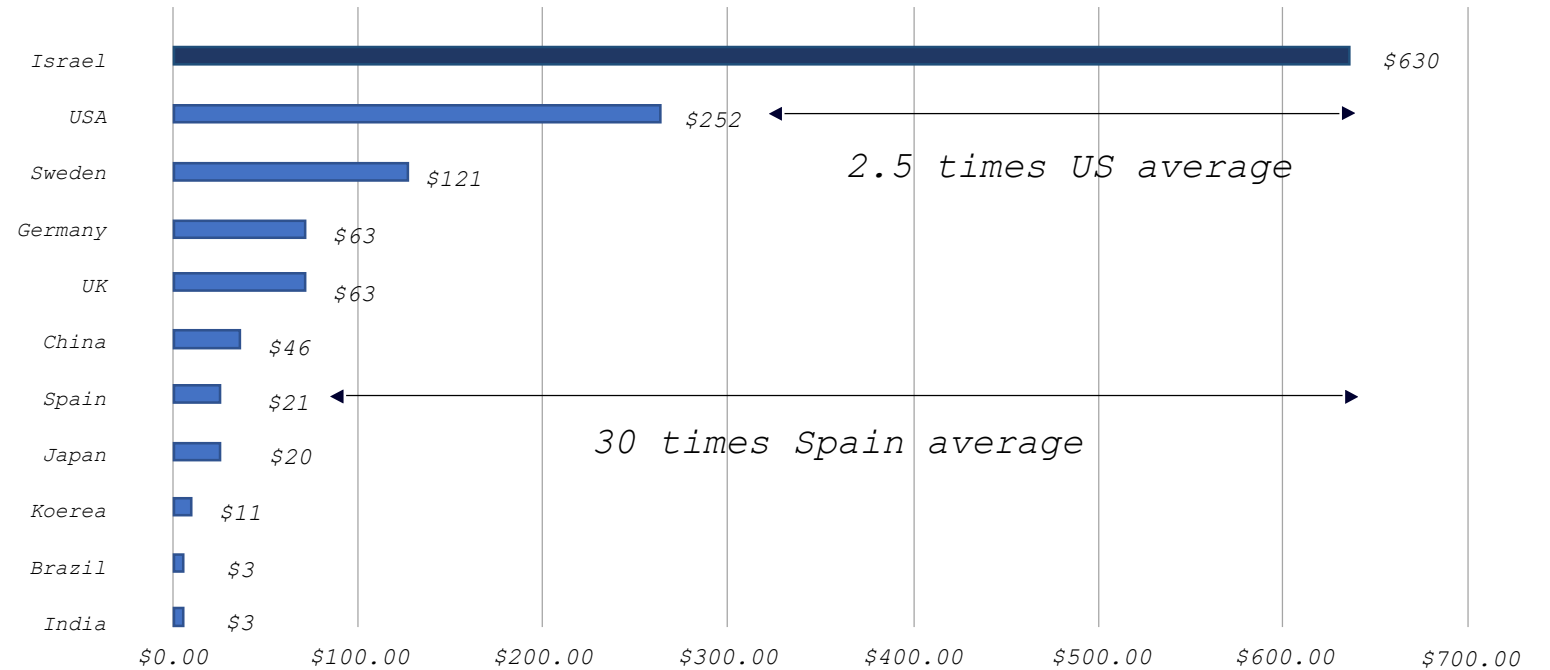


Source: IVC

- These markets share similar dynamism but Israel excels in data heavy deep tech and b2b -
Silicon Valley Indicators, www.siliconvalleyindicators.or, IVC Israel,
<http://www.ivc-online.com/>

Israel is the leader worldwide in per capita investment in venture capital

VC investment per capita USD millions, 2017



Source: IVC

- The concentration of startups in Israel is unrivalled worldwide -

Israel is the 100th smallest country in the world

1ST
in the world in the number of researchers per million population.²

1ST
in the world in the number of engineers per capita.³

1ST
in the world in R&D expenditure as a percentage of GDP.⁴

2ND
in the world in innovation.⁵

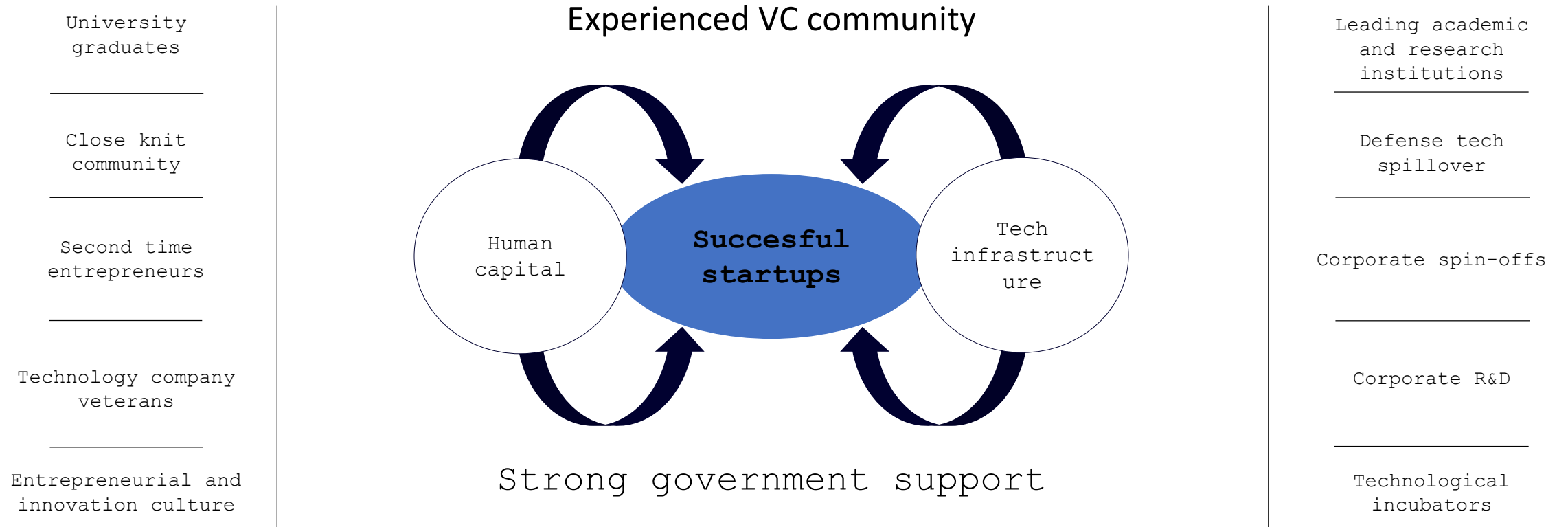
2ND
in the world in venture capital availability.⁶

3RD
in the world in the quality of scientific research institutes.⁷

3TH
in the world in corporate spending on R&D.⁸

Source: World Economic Forum, Invest in Israel

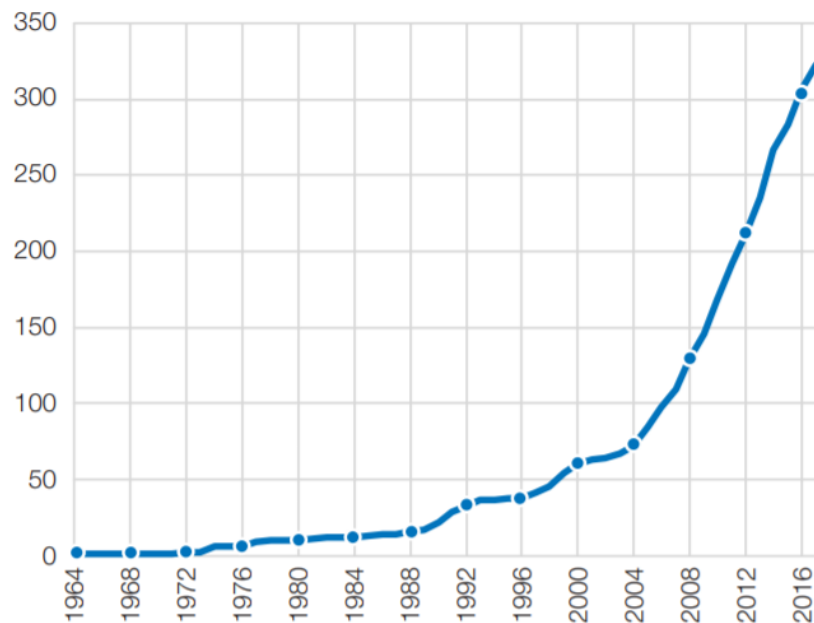
There are many unique traits that have enabled Israel's success



- A strong technological demand from the defense sector and an enabling government has created a fertile technology ecosystem

MNCs presence in Israel

of MNCs, 1964-2016



MNCs in Israel is exploding

- 1 Includes all MNCs activities (R&D, CVC)
- 2 Presence of ALL big players
- 3 Gradual opening of 2nd tier (in size, 10s of \$B)

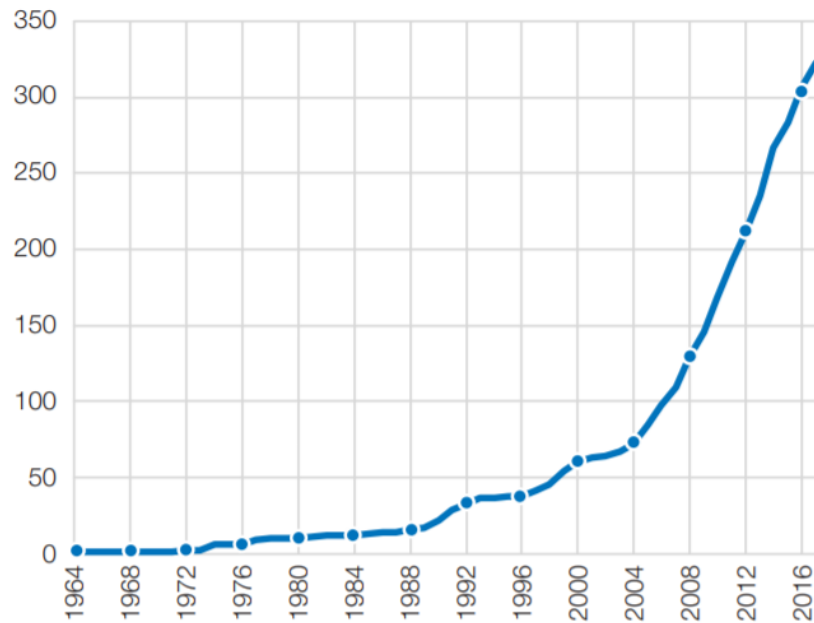
Israel paves the open innovation way

MNC RnD centers



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Israel paves the open innovation way

Diaspora
The trailblazers



IBM


IBM is the world's largest IT research organization and the first MNC that have established an Israeli center, in 1949. IBM has unique relationship of give and take with the Israeli research industry. Part of its facilities are shared with Israeli research institutes such as the University of Haifa.

FIRST R&D CENTER	1949
R&D CENTERS	9
ACQUISITIONS	15
EMPLOYEES	2,200
INVESTMENTS	\$3B



INTEL

Intel Israel is the company's largest operation outside the US. Intel's most strategic processors are developed in Israel, and Israeli plants are responsible for over billion chips and \$35 billion in exports to date.

 "IT IS A COMPLETE INTEL WITHIN A SINGLE COUNTRY. IT'S ABOUT THE PLACE WHERE YOU HAVE A COMPLETE CROSS-SECTION OF THE COMPANY IN ONE COUNTRY."
IBM RESEARCH / CEO

FIRST R&D CENTER	1974
R&D CENTERS	5
ACQUISITIONS	12
EMPLOYEES	10,000+
INVESTMENTS	\$11B
MANUFACTURING FACILITY	1



GENERAL MOTORS

GM Israel is a world-class technological center that guides creative thinking into unique innovations in areas of strategic importance to the automotive industry. The Israeli R&D center is the heart of GM's ambitious autonomous vehicle program. According to press announcements, the Israeli center is to be expanded in the upcoming years from 100 to 300 researchers. In addition, GM Israel operates GM Ventures which invests in young Israeli companies in various fields related to autonomous vehicles.

FIRST R&D CENTER	2008
R&D CENTERS	1
ACQUISITIONS	2
EMPLOYEES	100+
ANNUAL REVENUE	\$100M



APPLE

Apple's Herzliya and Haifa teams work on a variety of hardware technologies for its various devices: storage, chips, cameras, and wireless communication. Apple Israel employees work on the internal organs of iPhones, iPads, iMacs, and Apple watches. The Herzliya R&D center is the 1st center outside of the US and 2nd largest in the world.

 "APPLE IS IN ISRAEL BECAUSE THE ENGINEERING TALENT HERE IS INCREDIBLE. YOU GUYS ARE INCREDIBLY IMPORTANT TO EVERYTHING THAT WE DO AND TO ALL THE PRODUCTS THAT WE BUILD."
TIM COOK / CEO

FIRST R&D CENTER	2012
R&D CENTERS	2
ACQUISITIONS	3
EMPLOYEES	800+
INVESTMENTS	\$1.2B

Source: Invest in Israel

MNCs choose Israel
The path is M&A

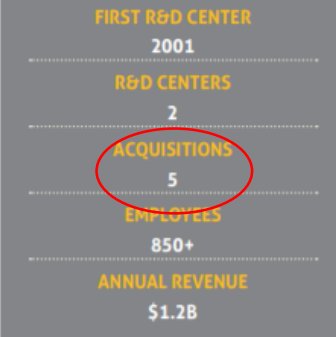
PHILIPS

PHILIPS

Phillips' R&D center in Israel has two arms: the first is Philips medical systems technologies LTD, which develops and manufactures CT machines. The second, Philips medical R&D center, works on image processing and analysis, developing applications for contemporary markets, such as virtual colonoscopy and virtual catheterization applications. The center specializes in 3D CT scanners. Following the Philips acquisition of Volcano in 2014, a leader in catheters measurement and imaging, another Israeli R&D center joined Philips Israel.



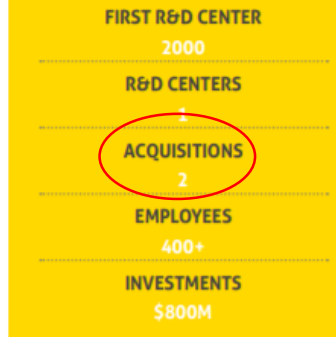
"THE SEARCH FOR THE SPIRIT OF INNOVATION LED US TO INCREASE OUR ACTIVITY IN ISRAEL BY 60 PERCENT IN THREE YEARS."
-FRANK VAN HOUTEN / PRESIDENT OF CSO



SIEMENS

SIEMENS

Siemens Israel is working to develop and manufacture products, design and install complex systems and projects, and tailor a wide range of solutions for individual requirements. Siemens Israel's main fields of research are renewable & conventional energy, healthcare, imaging and automation systems.



Microsoft

MICROSOFT

Israel has the highest number of Microsoft workers per capita and the Israeli center is the company's first R&D center outside of the US. Microsoft ATL (advanced technology labs), located in Israel, generate innovative ideas and develop breakthrough technologies, from signal processing to new products that push the envelope of Microsoft's products and services forward. Some of Microsoft core technologies such as Kinect, Gateway VPN Technology and Security Essentials Anti-Virus were developed in Israel.



"THE INNOVATION GOING ON IN ISRAEL IS CRITICAL TO THE FUTURE OF THE TECHNOLOGY BUSINESS."
-BILL GATES



Google

GOOGLE

Many of Google's key innovations were developed in Israel, such as: google trends, live results, google instant, google suggest and in-page analytics. One of the three worldwide campuses hosting google for entrepreneurs is located in Tel Aviv.

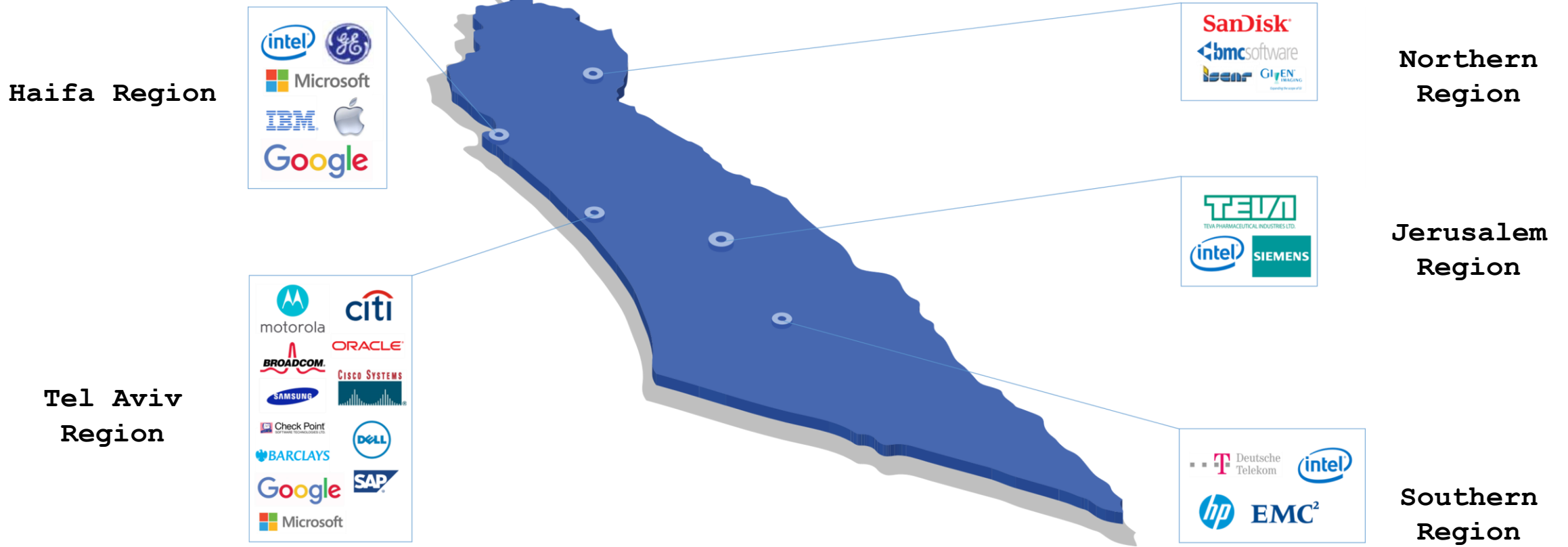


"THE DECISION TO INVEST IN ISRAEL WAS ONE OF THE BEST THAT GOOGLE HAS EVER MADE."
-ERIC SCHMIDT / FORMER CEO



Source: Invest in Israel

Israel is where multinational companies come in search of high quality R&D employees. A «brain» market



- World class R&D with 50,000 Hightech employees within a 60 minute radius -

The Israeli Government & Army

1967: French Weapons Embargo

Forced Israel to become self reliant for military technology and led to the formation of many of the advanced intelligence and computer units that have become the backbone of the Israeli Army and innovation/ startup sectors

1968: Office of the Chief Scientist

A Government office that works to commercialize advanced technologies. Today the OCS issues over \$30m of grants to startups each year.

Early 1990s: Business Incubator Program

Israel's Office of the Chief Scientist started 6 "incubators" to leverage the expertise of scientists, engineers and physicians who immigrated from the former USSR. Today there are 24 "incubators" situated across the country, designed to nurture and seed early stage technological developments.

1992: Yozma

Brought international investors to Israel

2010's: 8200 & The IAF Innovation Unit

Bringing innovation to the army, and sharing army innovation with the public and private sectors



יחידה 8200



OCS-Office of the
Chief Scientist
MINISTRY OF ECONOMY



נציבות
שירות
המדינה



Source: Invest in Ilan Regenbaum, Elevator