

# THE MASSACHUSETTS-ISRAEL ECONOMIC RELATIONSHIP

2ND EDITION

A Mutually-Beneficial Partnership  
Producing Jobs, Revenue, Growth, & Investment

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## EXECUTIVE SUMMARY

### ISRAELI INNOVATION AND ENTREPRENEURSHIP ARE A MAJOR DRIVER OF THE MASSACHUSETTS ECONOMY

An independent study by Stax Inc., a global strategic consulting and research firm, prepared for the New England-Israel Business Council, revealed that Israeli-founded businesses generate enormous revenue, jobs, and capital activity in Massachusetts. This study, updating a previous study of three years ago, found:

- **Over 200 Israeli-founded businesses called Massachusetts their home in 2012...**
  - ...which booked over \$6 billion of revenue in the Commonwealth...**
  - ...and generated nearly \$12 billion in economic benefit to the state**, inclusive of their own revenue, plus the multiplier effect of their spending in the local economy, for example, on office space and accounting, legal, marketing, healthcare, and other services.
  - ...representing 2.9% of the Massachusetts GDP in 2012,**
  - ...while their revenue grew 3x faster than the state's economy** from 2010-2012, and over twice as fast as the state's successful high-tech sector.
- **They directly employed over 6,600 people in the state...**
  - ...and supported over 23,000 jobs** based on the multiplier effect of their demand for goods and services in support of their businesses.
  - ...while their employee base grew 5x faster than the state's economy** from 2010-2012.
- **They secured nearly \$700 million in venture capital from 2010-2012**, across 73 deals, representing over 6% of all VC funds raised in the state...
  - ...and returned nearly \$2 billion to investors in M&A transactions from 2010-2012**, across 14 deals.

Israel is a global innovation powerhouse, with an impressive track-record of commercializing inventions that change the world and a proven ability of attracting capital and buyouts, based on an entrepreneurial culture and academic engine. Yet, Israeli entrepreneurs, due to the limited size of their local markets, seek access to U.S. and global markets early in the life cycle of their companies. They are attracted to Massachusetts because of its deep talent pool, academic and research strength, access to venture capital, concentration of technology industries, and world-class start-up resources.

The Commonwealth faces significant competition from other states in attracting Israeli-founded businesses, but has found success due to its East Coast location, lower cost-of-living versus NY and Silicon Valley, an established Israeli community, quality of life, and an ecosystem of supporting partners who understand their needs.

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The future success of the Massachusetts-Israel economic relationship will be based on growth within existing areas of strength (notably biotech, data storage, enterprise software, IT security, medical devices, networking hardware and software, and pharmaceuticals)—and also from rapidly emerging technologies with grounding in both geographies (such as 3D printing, cyber-security, eHealth, energy and water, fintech, gene mapping, homeland security, nanotech, neuroscience, personalized medicine, and robotics).

The concluding section of this whitepaper makes specific recommendations about opportunities to expand the relationship for accelerating growth and for the mutual benefit of both economies.

# ISRAELI ENTREPRENEURS CHOOSE MASSACHUSETTS TO BUILD GLOBAL BUSINESSES

Massachusetts is a top destination for Israeli entrepreneurs and innovators looking to build global businesses. Over 200 Israeli-founded businesses generated billions of dollars of revenue in Massachusetts in 2012, employing thousands, and attracting millions in venture capital.

To measure the impact of these Israeli-founded businesses on the Massachusetts economy, Stax Inc. prepared a study for the New England-Israel Business Council, based upon methodology developed at MIT<sup>1</sup>. The research addressed calendar year 2012, with comparison to a previous study of 2009.<sup>2</sup>

To qualify for inclusion in the research, a company must have one of more founders identified in company literature who are Israeli citizens and residents through the start of adulthood or later. Entrepreneurs born in Israel, but who left in childhood and did not return, were not included in the research set, as their Israeli experience was not material to their development towards entrepreneurship. For more details about the methodology of the research, please see the Appendix.

For the purposes of this paper, companies that met the research criteria are termed “Israeli-founded” or “qualifying.”

## REVENUE: BILLIONS OF DOLLARS AND GROWING FASTER THAN THE ECONOMY OVERALL

Israeli-founded businesses have achieved enormous success in Massachusetts, with benefits for both the entrepreneurs and the state.

### In 2012, these qualifying businesses:

- **Booked \$6.2 billion of direct revenues in the state.** Using both public and private data, the study conservatively counted only sales originating from these businesses’ Massachusetts location(s). See figure 1, “Israeli-Founded Businesses Create Massachusetts Revenue.”

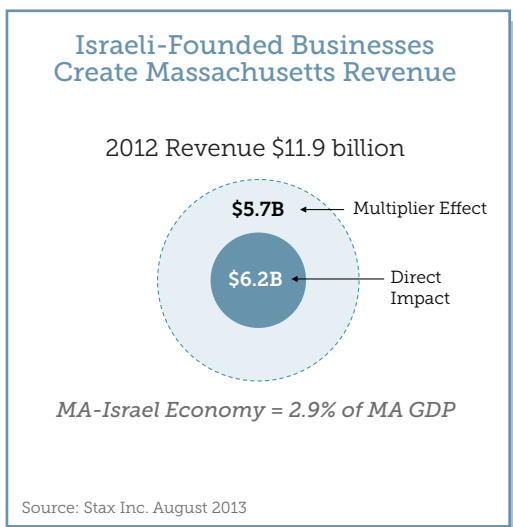


Figure 1

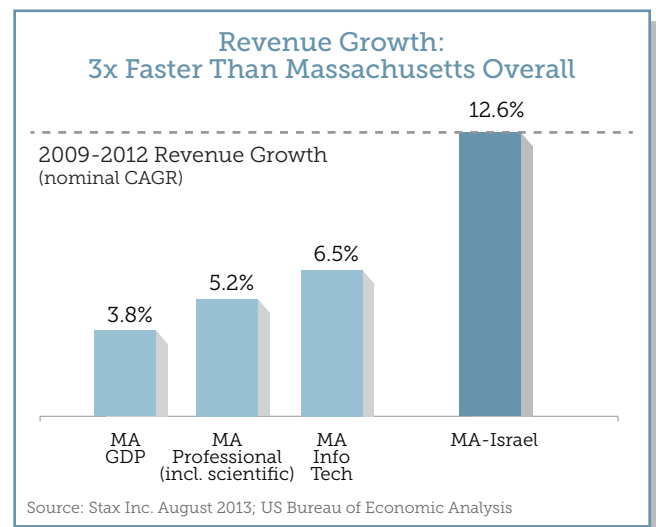


Figure 2

- **Generated a total of \$11.9 billion in economic impact for Massachusetts.** Using standard U.S. Bureau of Economic Analysis multipliers, Israeli-founded businesses generated billions of dollars of revenue above their own economic activity, due to their purchase of office space, professional services, and other goods and services.
- **Represented 2.9% of the state's overall GDP,** with almost all of it in the growth sectors of life sciences and information technology, and therefore comprising an even larger share of the state's innovation economy.<sup>3</sup>
- **Grew at 3x the rate of Massachusetts GDP growth.** Israeli-founded businesses identified in both the 2009 and 2012 studies saw their revenue increase at a 12.6% compound annual growth rate (CAGR). Compared to the state economy's GDP growth rate of 3.8% during this period, Israeli-founded businesses grew more than 3x faster. Even compared with the Massachusetts high-growth tech and professional services sectors, qualifying businesses expanded 2x faster. See figure 2, "Revenue Growth: 3x Faster Than Massachusetts Overall."

## JOBS: EMPLOYING THOUSANDS IN MASSACHUSETTS AND GROWING FASTER THAN THE ECONOMY OVERALL

Israeli-founded businesses depend upon Massachusetts talent to achieve their phenomenal record of growth. In 2012, these qualifying businesses:

- **Employed 6,700 in Massachusetts.** See figure 3, "Israeli-Founded Businesses Create Massachusetts Jobs".
- **Supported a total of 23,400 jobs in Massachusetts.** Using standard U.S. Bureau of Economic Analysis multipliers, Israeli-founded businesses drove the employment of thousands more due to purchase of other goods and services to support their enterprises.
- **Grew at 5x the rate of the Massachusetts employment growth.** Israeli-founded businesses identified in both the 2009 and 2012 studies saw their employee bases increase at a 5.3%



Figure 3

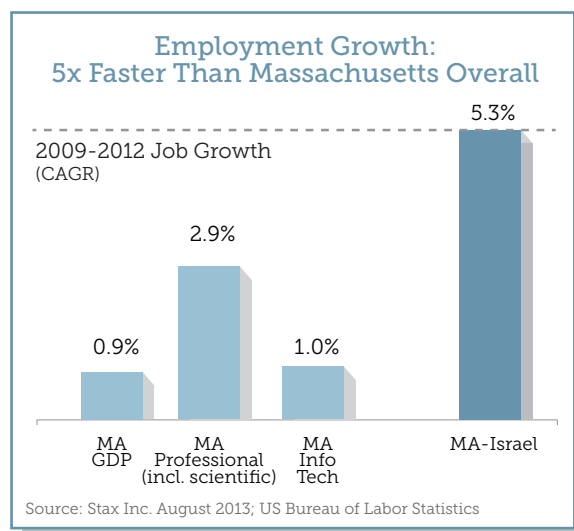


Figure 4



compound annual growth rate (CAGR). Compared to the state’s employment growth rate during this period of 0.9% overall, the Israeli-founded companies’ employee growth was 5x faster. Even compared with the Massachusetts high-growth tech and professional services sectors, the Israeli-founded companies expanded faster. See figure 4, “Employment Growth: 5x Faster Than Massachusetts Overall.”

In addition to the revenue and jobs produced by the Israeli-founded companies in Massachusetts, exports are another source of revenue that Massachusetts derives from its relationship with Israel. Massachusetts businesses exported \$232 million in goods and services to Israel in 2011, up 27% since 2009.<sup>4</sup>

## CAPITAL: ATTRACTING BILLIONS IN INVESTMENTS AND BUYOUTS TO MASSACHUSETTS

Israeli-founded businesses in Massachusetts pulled in over \$2.7 billion in capital during the period 2010 through 2012:

- **73 venture capital transactions scored nearly \$700 million.** Some VCs even made multiple placements, and are well attuned to Massachusetts-Israel opportunities—including Boston-based firms (such as Bain Capital Ventures, Battery Ventures, and Globespan Capital Partners), Israeli-based firms (such as Cedar Fund, Pitango Venture Capital, and Vertex Venture Capital)—plus top-shelf



Figure 5

VCs and corporates from Silicon Valley, NYC, and around the world. See figure 5, “Top Tier U.S. & Israeli VCs, Corporate Investors”.

- **...representing 6.4% of all VC investments raised in the Commonwealth.**<sup>5</sup>
- **...while the pace is accelerating.** See figure 6, “Venture Investments: Significant and Accelerating”.
- **14 acquisitions returned over \$1.9 billion to investors.** Israeli-founded companies in Massachusetts have a long history of successful exits, as acquirers have sought their innovations to beef up product portfolios and accelerate growth (see figure 7, “Selected List of Acquisitions Involving Massachusetts & Israeli-Founded Companies”).<sup>6</sup>

Among the transactions in the study period of 2010-2012, IBM acquired Emptoris, a supply

management software company founded in Massachusetts by an Israeli entrepreneur, for an estimated \$600 million. After the deal, IBM has kept the product and employee team in place in Massachusetts, and expanded the product's reach to the IBM global customer base.

## COMPANIES: GROWING IN NUMBER FROM DIVERSE INDUSTRIES

The 211 Israeli-founded companies identified in the research are concentrated in many sub-sectors of life sciences and IT, and continue to increase in number rapidly:

- IT companies show muscle in data storage, security, networks, and enterprise software.** Half of the Israeli-founded start-ups in Massachusetts are in the IT sector, with the most common focus in corporate software, hardware, and services. Notable firms include Akamai (\$1.4 billion in 2012 sales), Comverse (\$700 million in 2012 sales), CyberArk (which scored the third largest VC fundraising in Massachusetts in 2011), iBasis (\$1.3 billion in 2012 sales), Simplivity (which has raised \$101 million in VC funds since 2009), and Trusteer (which was acquired by IBM in 2013 for a reported \$800+ million).
- Life Sciences firms are numerous in medical devices, biotech, pharma, and eHealth.** The opportunity to be part of the world's leading life sciences cluster has attracted a quarter of the Israeli-founded start-ups in Massachusetts, including American Well, Argo Medical, Corindus, EarlySense, Karyopharm, Millennium Pharmaceuticals (counting only its product Velcade, which is based on Nobel Prize winning research from Israel), and OmniGuide.
- eCommerce, defense, fintech, and energy and water have strong footholds.** The remaining quarter of Israeli founded companies in Massachusetts—over 50—correspond to sectors that are well grounded in the Commonwealth, such as

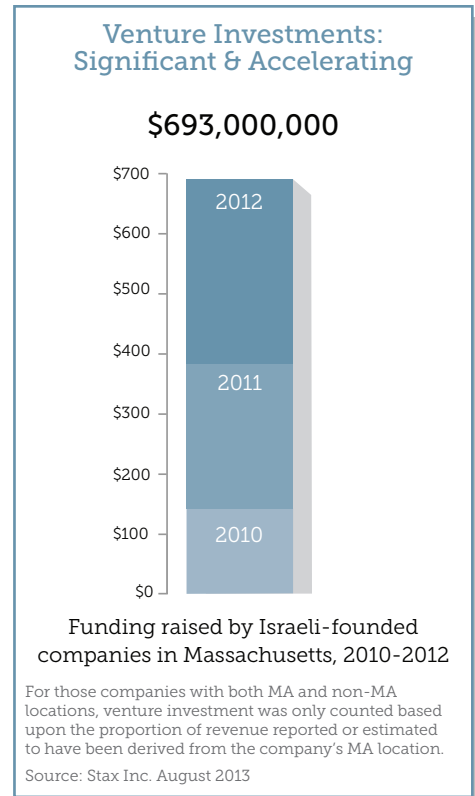


Figure 6

## Selected List of Acquisitions Involving Massachusetts & Israeli-Founded Companies

acquirer	acquired MA-Israel companies	total acquisition value
IBM	Diligent, Emptoris, Storwize, Trusteer	\$1,740m
EMC <sup>2</sup>	Cyota, Illuminator, Kashya, More It, nLayers, ProActivity, ScaleIO, XtremIO, Zettapoint	\$1,390m
COVIDIEN	Oridion, PolyTouch, superDimension	\$640m
VERITAS	Precise Software	\$609m
Boston Scientific	Labcoat, Remon Medical, Rhythmia Medical, SI Therapeutics	\$386m
Akamai	Cotendo	\$286m
TRIZETTO	CareKey	\$100m
TPG	iMDsoft	\$80m
OSEM	Tribe Mediterranean	\$57m
ORACLE	Demanttra	\$41m
PTC	Enigma	\$20m

Selected acquisitions 2003-2013; Acquisition value as reported in SEC filings or from media reporting

Figure 7

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Aptima (homeland security), Currensee (financial), Gazelle (eCommerce), and EnergyPoints (energy and water).

- **And they keep coming.** From 2009 to 2012, an additional 43 Israeli-founded companies established their Massachusetts presence. Many are well funded and already employee dozen(s). Standout new entrants include Argo Medical, Credorax, Desalitech, EarlySense, EnergyPoints, Profitect, Scalebase, Simplivity, VMTurbo, and Zerto.

## MANY PATHS FROM ISRAEL TO MASSACHUSETTS

How do these Israeli entrepreneurs and innovations find their way to Massachusetts? The research shows five main routes:

- **Launch a company in Israel, expand into the U.S.** Originating at an Israeli university or incubator, and/or funded by angels or Israeli VCs, these businesses accomplish their initial R&D work and commercial launch in Israel. Then they chose Massachusetts as their “home away from home” to tackle the American market. Notable examples include Comverse, Cyber-Ark, and Guardium (acquired by IBM).

- **Go to university in Massachusetts, then choose to grow the company here too.** Israeli alumni of Massachusetts colleges started 30% of the Israeli-founded companies in the state.<sup>7</sup> Foreign students who come here for study and research develop connections and familiarity that take root. For the Commonwealth, it’s the Holy Grail of “student retention.”

Some founders start their companies during or immediately after their academic careers, but most return to Israel to start their business, then make their way back to Massachusetts for the company’s growth phase.

- **Get acquired.** Since 2000, at least 30 companies based in Israel have been acquired by Massachusetts businesses.<sup>8</sup> The acquired Israeli company gains expanded market access and capital, while the Massachusetts company secures new technology or important talent to grow the business. EMC has done particularly well mining Israeli start-ups to grow the Hopkinton-based empire, having acquired nine companies to date (see sidebar, “EMC & Israel”).<sup>9</sup>

### EMC & ISRAEL

With \$23 billion in revenue and a \$50 billion market cap, EMC is the state’s largest tech giant, and one of its most successful companies. EMC’s long history with Israel traces back to when the company transformed from selling minicomputer memory boards to enterprise storage arrays. The makeover began when Moshe Yanai, an Israeli recruited to EMC, led a team in the 1980s and 1990s to create and develop Symmetrix, the company’s flagship product, which remains the world’s most successful computer storage system.<sup>10</sup>

Since 2005, EMC has acquired nine Israeli companies, totaling over \$1 billion, including Kashya, XtremIO, and ScaleIO. Today, EMC employs over 1,000 people in Israel. In addition, many Israeli-founded companies choose Massachusetts for their U.S. headquarters to be near EMC and at the epicenter of the storage and security industry, including CloudLock, Kaminario, Scalebase, Viewfinity, and others.

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- **Win a Nobel, or create IP, that gets commercialized in Massachusetts.** The most notable example is the development of the cancer-fighting drug Velcade by Millennium Pharmaceuticals of Cambridge, based on Nobel Prize winning research by three professors, including Ciechanover and Hershko of Israel's Technion Institute.
  - **Start a company in Massachusetts (and do it again).** Access to capital, customers, talent, or family are other reasons why Israeli-founded businesses call Massachusetts their home. Some of these founders are serial Massachusetts entrepreneurs, with multiple successful companies to their name.

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## MASSACHUSETTS IS A MAGNET FOR ISRAELI ENTREPRENEURS

Massachusetts is the #1 ranked innovation state in four consecutive surveys from 1999-2012, according to the widely watched “State New Economy Index”. Using 26 indicators in knowledge jobs, globalization, economic dynamism, and the digital economy, the state has consistently posted the strongest overall results to keep it ahead of all U.S. competitors.<sup>11</sup> These strengths closely align with the needs of Israeli entrepreneurs. As a result, the Commonwealth has become a preferred “home away from home” for Israeli-founded start-ups looking to launch or grow a business.

### A WORLD-CLASS INNOVATION ECONOMY

Compared with other leading technology states<sup>12</sup>, Massachusetts strengths include:

- **A deep talent pool.** In awarding new college degrees, Massachusetts is the #1 ranked state per capita, and globally ranks fourth compared to countries worldwide. Similarly, it globally ranks fifth in labor productivity.

Beyond new graduates, the state also boasts the most highly educated population of any state in the country, and counts four of the top ten U.S. cities with the most educated citizens.<sup>13</sup> Whether companies need experienced talent or fresh faces, Massachusetts demonstrably has the top workforce in the United States.

- **The top-ranked universities and #1 city for students in the USA.** Massachusetts is widely recognized as the higher education capital of America. 74 colleges in the Boston-area enroll 265,000 students, conferring more degrees than any other state, and being honored as the *only* North American city to score in the top ten of “Best Student Cities” by the respected QS World University Rankings. Harvard and MIT need no introduction, other than to note that they show up in almost every top-ten list — usually at #1 or #2 — for business, engineering, research, math and sciences, and most other disciplines. The long list of schools showing up at the top of national or subject-specific rankings includes: Babson, Boston College, Boston University, Brandeis, Clark, Northeastern, Olin, Smith, Tufts, UMass Amherst, UMass Worcester, Wellesley, Williams, and Worcester Polytech. The combined power of these institutions spins out a highly educated workforce, research-driven innovation, cultural diversity, and an enlightened population.<sup>14</sup>
- **Heavy-duty R&D.** The concentration of academic and corporate R&D in Massachusetts is unparalleled. Notable measures of success include: Over \$21 billion of R&D investment in 2011. The highest number of patents per capita. First in the U.S. in the production of science and engineering academic articles per R&D dollar. More technology licensing, and more Small Business Innovation Research (SBIR) grants per dollar of GDP. And the largest share of National Institute of Health (NIH) research funding of any state. These key indicators all point to how tech-intensive businesses thrive on the innovations gained from the Commonwealth’s leading position in U.S. R&D.

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- **Top-tier VC and other funding sources.** Venture capital investment in Massachusetts was \$3.0 billion in 2012, more than 50% higher than New York's. On a per capita basis, the state ranks #1 in placing venture investments, higher than California. Meanwhile, angel investment doubled between 2009 and 2011. The state even scored second in IPOs in 2012—behind California, but beating New York again.
  - **Intense concentration of diverse sectors.** The remarkable ecosystem of tech industries in Massachusetts draws start-ups and giants from around the world to setup shop in the Commonwealth:
    - **World's leading life science industry.** In Massachusetts, over 1,100 drugs are in the pipeline, representing 11% of all American drug development. Twelve major firms have over 1,000 employees in the state—including Genzyme (Sanofi), Pfizer, Biogen IDEC, and Novartis—among the 550 firms in the state. The state captured 21% of all U.S. biotech VC dollars in 2012. The top 3 NIH grant recipient hospitals are located in Boston, and the Commonwealth has more biotech R&D employees than any other state. Nine incubators, 18 million square feet of lab space, and nearly 100,000 employees, plus big and small companies in medical devices, healthcare IT, and analytics—together create extraordinary breadth and depth in all life sciences sectors.<sup>15</sup>
    - **Everything internet and IT.** Over 100 big data companies call Massachusetts home, many with \$1+ billion exits. Over 50 VC-backed mobile start-ups, and hundreds of Android and iPhone developers are located in the state. Scores of companies in the following fields make the Commonwealth home: cloud computing, digital games, electronics and semiconductors, robotics, education tech, eCommerce, travel, online video, speech, and marketing tech—led by top tier companies such as Akamai, Harmonix, Analog Devices, iRobot, edX, Wayfair, TripAdvisor, Brightcove, Nuance, and HubSpot.<sup>16</sup>
    - **Climbing to the top of energy innovation.** Massachusetts is quickly climbing to the top of the global clean energy sector, with over 5,000 firms in the state, nearly 80,000 jobs, and 11.8% employment growth in 2012.<sup>17</sup> Seven companies in the state were named to the 2013 Global Cleantech 100 (including Desalitech, with dual-headquarters in Israel.)<sup>18</sup> Boston was named the most energy efficient city in the USA, beating out San Francisco, New York, and all others.<sup>19</sup> And while investment in cleantech is taking a breather globally, VC investment in Massachusetts companies rose 10% in 2012, and the state could boast receiving 16% of all American VC cleantech investments, and 11% of global investments.<sup>20</sup>
    - **Research smarts and global reach in water technology.** The state has a multi-billion-dollar water tech industry, with strength in engineering, analysis and measurement, command and control, filters and membranes, valves and other hardware. Large-company headquarters include CDM Smith, Koch Membrane Systems, Waters, and Watts Water, and significant divisional presence by Xylem, AECOM, Sloan Valve, and Siemens Water (just infused with new cash by a private equity firm). MIT, Woods Hole, Tufts, and UMass conduct research and graduate scores of master's degree recipients in water disciplines, contributing to the highest number of water innovation patents per capita in the states. The Boston-area has
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also attracted more EPA SBIR grants than any other metro. Dozens of water tech start-ups call Massachusetts home, often taking-up residence at Greentown Labs or MassChallenge, or winning awards like the MIT \$100k, Cleantech Open Northeast, and the Artemis Top 50.<sup>21</sup> Industry executives from Massachusetts even organized the “W.E.T. Revolution Competition” in Israel to help Israeli companies advance their water export technologies into global markets.<sup>22</sup>

- **A raft of multi-billion-\$ companies.** Not well known is the state’s success fostering start-ups into tech giants. Massachusetts tech companies which sport market valuations in the billions of dollars include: Akamai, Analog Devices, athenahealth, Biogen Idec, Covidien, EMC, Nuance, ThermoFisher Scientific, Trip Advisor, Vertex Pharmaceuticals, Waters, and others.

These titans serve as platform companies that attract clusters of other innovators in their fields, and provide local talent with experience scaling a company from small to large.

Even global giants headquartered elsewhere have felt compelled to place roots in Massachusetts for access to the local talent pool, including companies such as Google, IBM, Microsoft, Cisco, Amazon, eBay, Facebook, Twitter, Disney, and others.

- **World-class start-up resources.** At venues all across the city—from Cambridge’s Kendall Square to Boston’s Innovation District—entrepreneurs and experienced hands gather together to network, learn, play, dream, mentor, and pitch at a daily smorgasbord of events and programs. A short list of these start-up turbochargers include:
  - Incubators like MassChallenge, TechStars, Bolt, Cleantech Open Northeast, Dogpatch Labs, and Greentown Labs.
  - Co-working spaces for tech and life sciences, such as Cambridge BioLabs, Cambridge Innovation Center, and Workbar.
  - Start-up education from intelligent.ly, General Assembly, and Startup Institute.
  - Networking events like Boston New Tech Meetup, hack/reduce, Lean Startup Circle, Mass Innovation Nights, MIT Enterprise Forum, MIT Hackathon, Mobile Monday, Revolve Nation, Techies Got Talent, TiE Boston, and the Venture Café.
  - Student focused programs like Summer@Highland, Harvard’s iLab, and the MIT \$100k Entrepreneurship Competition.<sup>23</sup>

**“MASSACHUSETTS  
RANKED FIRST — AGAIN.”**

“By widening the gap between it and other states, Massachusetts has further cemented its lead in science and technology. With a critical mass of universities, research, institutions, and cutting-edge firms, the indomitable state has placed first in every edition of the index.”

—Milken Institute,  
State Technology and  
Science Index 2012

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## THE SPECIAL ATTRACTIONS OF MASSACHUSETTS FOR ISRAELI FOUNDERS

The state's stellar characteristics make it attractive to entrepreneurs from all geographies. But for Israeli founders, Massachusetts brings additional benefits unique to their interests.

- **Boston is a lot easier to reach than the West Coast.** Silicon Valley has its attractions, but one of them is not distance from Israel. Even the best flight options from SFO make the trip to TLV six hours longer, which can be extra grueling if you happen to be the designated company executive to plant the company flag in the U.S. (And BOS-TLV flights cost hundreds of dollars less.)<sup>24</sup>
- **Boston has time-of-day overlap with Israel.** Israel is seven hours ahead of the East Coast, meaning that a company with offices in Boston and Tel Aviv can schedule check-ins until at least 10:00am Eastern Time any day. But Palo Alto, which is ten hours behind Tel Aviv? No such luck.
- **Boston talent costs less than workers in Palo Alto or NYC.** The average cost of compensation in Palo Alto—the center of Silicon Valley—is 16% higher than Boston's. And New York City? A whopping 28% higher than Boston.<sup>25</sup> Boston's higher-quality talent at a lower cost is a winning combination for start-ups managing their burn rate.
- **Massachusetts trumps California and NY on taxes.** Which is the worst tax state in the nation, placing 50th? New York. Close behind, California is 48th. Complexity and high-rates drive taxpayers in those states crazy. In comparison, Massachusetts is in the middle of the pack at 25th. When your start-up begins raking in the profit, the Big Apple and Big Sur keep a much bigger bite.<sup>26</sup>
- **An established Israeli community.** Decades of Israeli entrepreneurship in Massachusetts have resulted in a well-established community of Israeli expatriates, who enjoy helping their visiting friends and colleagues figure out where to live, where their kids can get a great education in English *and* Hebrew<sup>27</sup>, take them to a Celtics game, or put them on the guest list for the Israel Independence Day / יום העצמאות party.

In addition, many groups in Massachusetts have as their mission to provide networking opportunities for Israelis, such as the New England-Israel Business Council, BIG (The Boston Israel Group), the American Technion Society, BioAbroad, and others.<sup>28</sup>

- **VCs with offices or specialization in Massachusetts-Israeli businesses.** Over 30 venture capital firms placed investments in Massachusetts-Israeli businesses during 2010-2012, but a few have developed even deeper knowledge of and commitment to the unique combinations of the two geographies. For example, Cedar Fund (of Herzliya and Waltham) has ten current Israeli-founded Massachusetts companies in its portfolio, with multiple successful exits, including BigBand Networks, Guardium, and Onaro. Battery Ventures (of Waltham and Herzliya), with notable investments on both shores, has also scored significant exits with their Israel-founded portfolio companies XtremIO and Kashya to Massachusetts-titan EMC. Globespan Capital Partners has four Israeli-founded Massachusetts companies in its portfolio, including Kaminario, Perfecto Mobile, Pursway, and VMTurbo.



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- **Professional service firms with Israeli practice areas.** Helping U.S.-Israel binational businesses is a specialty that requires knowledge of cross-border transactions, international IP, taxation rules, employment agreements, and cultural differences. In the field of law, the best attorneys are not merely legal counselors, but also provide critical connections to potential investors and partners, and credibility with blue-chip partners as the company scales. Firms recognized for their Massachusetts-Israel business acumen include Goodwin Procter, Mintz Levin, Foley Hoag, and others. Many of their Israel-based counterparts have setup shop in Massachusetts too—such as PCZL, Tulchinsky Stern, ZAG/S&W—to shepherd their seedling clients into the U.S. market. Beyond law firms, many other Massachusetts firms specialize in helping Israeli firms enter the U.S. market, such as the media relations firm Rainier Communications, and the medical device experts at Boston MedTech Advisors.
  - **An outstanding quality of life.** Greater Boston, which is the center of the seven states of New England, offers a beautiful, enriching place to work, play, and raise a family. Massachusetts attracts residents and business outposts from around the world, especially because of its superior K-12 education, outstanding healthcare, abundant cultural institutions, the sports-crazy culture, and the state’s history as the “Birthplace of the American Revolution”. For those who need to choose a “home away from home”, Massachusetts has track record as one of the most desirable locations in America.

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## TEN DRIVERS OF THE MASSACHUSETTS-ISRAEL SUCCESS STORY

The Massachusetts-Israel ecosystem has developed its enormous depth and breadth over a period of decades. Ten major drivers of success of this bilateral relationship include:

- 1) Israeli entrepreneurs seek access to U.S. and global markets....** Israel has a small home market, with only about 8 million people, and not much of a regional market due to the struggling economies, war-torn neighbors, and animus to the Jewish state in Syria, Lebanon, and Egypt. While Israel's small population is well suited to early-stage market testing, success and return on capital can only come by tapping into America's larger market and establishing local connections to partners who can help firms globalize.
- 2) ...and want to plant roots at the center of their industrial sectors.** Israeli entrepreneurs establish U.S. headquarters early in their companies' maturity to access a larger pool of talent, managerial expertise, channel partners, key prospects, and concentrations of venture capital in their specific areas of business focus.
- 3) The Massachusetts governor and state government are active trade promoters.** Governor Deval Patrick's 2011 Trade Mission to Israel set the bar for state outreach to an economic partner, with significant follow-up and real outcomes. Most notably, as a result of this Governor's mission, Massachusetts became the first U.S. state to establish and implement a grant program with Israel's Chief Scientist for promising commercial R&D projects. Targeted at life sciences, energy, water, and health IT, three Massachusetts agencies are already engaged in awarding their second year of grants.<sup>29</sup>
- 4) The Israeli government prioritizes Boston and New England relationships.** Boston is one of only a handful of U.S. cities that have merited Israeli Consulates, which brings extra attention to local opportunities. (For example, cities with more than double the population of Boston, such as Dallas, Phoenix, and San Diego, haven't yet earned that level of attention.) Notably, the New England office was the first Consulate worldwide to establish a full-time economic affairs office in 2011, recognizing the enormous opportunity for Israeli-founded business in the greater Boston area. It organizes an endless stream of events, such as the CEO Forum series and the annual mega-sized Israel Independence Day Party. And Israeli Chief Scientist Avi Hasson landed Massachusetts as the first U.S. state for its cooperative R&D grant program backed by real financial resources.
- 5) BIRD grants seed the opportunities.** BIRD (the U.S-Israel Binational Industrial Research and Development Fund) provides grants for promising commercial R&D opportunities between the U.S. and Israel. Over 800 projects have been funded by BIRD since 1977—and Massachusetts companies have been awarded more than 10% of these grants, the second-most of any state. Some of the companies that have benefited from BIRD grants and anchored new Massachusetts-Israel partnerships include Argo Medical (ReWalk), Axxana, BigBand, Desalitech, enVerid, EMC, Ginger Software, and Houghton Mifflin.

6) **New developments continue to arise, like MassChallenge Israel.** The world’s largest startup accelerator, Boston-based MassChallenge selected Tel Aviv for its first expansion abroad in 2013. Response exceeded expectations, attracting 100 Israeli start-up teams, which led to the selection of seven finalists for the four-month incubator program. The brilliant “no strings attached” program attracts the best-of-the-best to the Massachusetts ecosystem, where they learn and play, building relationships in the Commonwealth for the time they are ready to return to the USA. Companies like EMC, The Kraft Group, and Israel’s leading food conglomerate Strauss Group have invested to get the program off the ground.

7) **Massachusetts universities are the calling card for Israeli students.** The first exposure for many of future Israeli founders of Massachusetts businesses is higher education. Nearly 300 Israelis are studying or doing research in undergraduate through post-doc programs, most often at Harvard, MIT, Brandeis, Berklee, or Boston University. (See figure 8, “Almost 300 Israelis Study in Massachusetts, Kickstarting Their Relationship in the State”). Many of Israel’s most prominent leaders earned degrees in Massachusetts, including Prime Minister Benjamin Netanyahu and Stanley Fischer, Governor of the Bank of Israel.

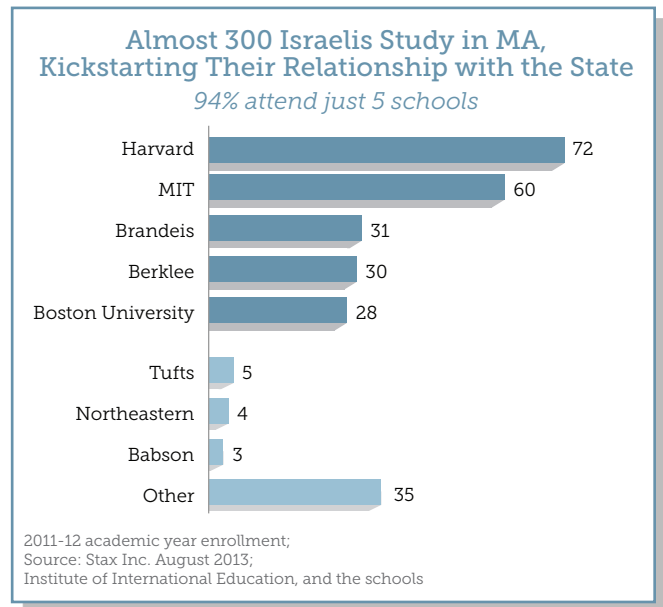


Figure 8

Israeli students who attend college in Massachusetts usually leave the state after graduation. But tellingly, if they start or expand a business, they often choose Massachusetts, demonstrating that the ties they developed previously pay dividends later. These entrepreneurs felt most comfortable setting up shop in the place where they previously set down roots.

8) **Massachusetts academia fosters learning about Israeli contributions to global society.** Undergrad and grad students at many Massachusetts schools gain exposure to Israeli business and academic life through a wide-selection of seminar courses, study abroad programs, and internship opportunities (see sidebar: “A Selection of Israeli-Related Academic & Research Programs in Massachusetts”).

9) **Non-profits build lasting connections.** Dozens of NGOs in Massachusetts count “building relationships with Israel” as a core part of their missions. Among the most notable:

- a) The New England-Israel Business Council sponsors a steady stream of networking events and seminars throughout the year, in sectors as diverse as mobile health, water tech, and

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## A SELECTION OF ISRAELI-RELATED ACADEMIC AND RESEARCH PROGRAMS IN MASSACHUSETTS

**MIT's MISTI Israel program has arranged 200+ personalized internships in Israel since 2008.** In this all-expenses paid program, students from undergrad through doctorate levels have worked on projects such as synthetic drug development at Teva Pharmaceuticals, 3D image processing at Google Israel, robotic vision at Technion, and computational biology at the Weizmann Institute. Additionally, a new post-doctoral stipend funds six Technion PhDs to take up fellowships at MIT each year. Another program, MEET—*Middle East Education through Technology*—uses technology and business to create bonds among Israeli and Palestinian students, based on an intensive three-year program in Jerusalem taught by instructors from MIT. Overall, MIT has over 500 alumni in Israel, who maintain their connection to the Cambridge institution through networking events and hosting Massachusetts delegations.

**Brandeis University blazes new trails of connection to Israel.** The university's tight bond with Israel began in 1948, the year in which both the school and the State of Israel were founded. Supreme Court Justice (and Boston lawyer) Louis Brandeis, namesake of the school, was also an early proponent for the founding of modern Israel, making today's connection even more fitting.

For students, the University sponsors the only Hebrew-language immersion program in Israel for American students at the Ben Gurion University. Active student-run clubs include a chapter of the TAMID: Israel Investment Group, bView (Brandeis Visions

for Israel in an Evolving World), and BIPAC (Brandeis Israel Public Affairs Committee). A steady stream of Israeli officials are Brandeis visitors, including recent Israeli Ambassador to the U.S. Michael Oren as a Commencement Speaker.

Brandeis faculty are enriched by the Schusterman Center for Israel Studies, sponsor of the *Israel Studies* journal, the Jellyfish online resource for Israel studies, many visiting Israel scholars, and the Summer Institute, which has trained hundreds of faculty from around the world about setting up their own Israel Studies programs.<sup>30</sup>

**Harvard University has a deep and diverse engagement with Israel.** From the summer programs in Israel for archaeological exploration and ancient history study, to the Harvard Israel Trek, to the steady stream of the senior Israeli officials who speak at the university—like Shimon Peres, Tzippi Livni, and Amos Yadlin—interested students can find many opportunities to learn and connect. Meanwhile, Harvard is the top destination for Israeli students enrolled in Massachusetts colleges, many arriving with the support of the Wexner Fellowship and soon, the new Idan Ofer scholarships for promising young Israeli leaders.

**The Broad Institute of MIT and Harvard sponsors an Israel Partnership for Cell Circuit Research** which brings together scientists to tackle major challenges in computational and systems biology by providing full salary, benefits and research expenses for Israeli post-docs.<sup>31</sup>

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homeland security. Programs like the NEIBC Life Sciences Summit draw a wide audience of VIPs interested in exploring opportunities between the two geographies.

- b) CJP, which fosters relationships with Israel through expert speakers, missions, and celebrations, supports an astonishing number of ongoing programs and special events for Boston-based residents. A brief list of its many successes includes Birthright, the Boston-Haifa Connection, the VC Mission to Israel, the Massachusetts Water Innovation Mission to Israel, and the Harvard Dean’s Academic Mission to Israel.
- c) American Technion Society, which brings world-renowned academicians to the Bay State throughout the year for public presentations in fields such as robotics, stem cells, and tech transfer.
- d) Jewish National Fund, which connects Massachusetts residents to the land, water, environment, and communities of Israel through briefings and travel.
- e) The Jewish Community Relations Council runs annual Beacon Hill legislators’ missions, as well as clergy tours, to connect non-Jewish leaders to Israel in areas of their interest, such as innovation in environmental policy, social service, and Christian heritage.
- f) Additionally, many other organizations operate annual missions between Boston and Israel to train and connect dozens of leaders, such as the Wexner Israel Fellowship at Harvard University, the MAOZ-Seal Leadership Program, and the Ruderman Fellows.<sup>36</sup>

**10) A robust Jewish community who is strongly connected to Israel.** The state’s Jewish community is over 200,000 in population and growing, representing more than 9% of the greater Boston population. It is a highly educated group, as 27% have earned a Master’s or higher degree. The majority of households are engaged in Jewish life—in all major categories of affiliation—including synagogue membership, Jewish learning, communal service, and philanthropy. And the connection to Israel is strong, with 95% report “feeling attachment to Israel.” Local community leaders observe that Jewish life in Boston, one of the oldest Jewish communities in America, is experiencing a renaissance that has been on a steady uptrend for thirty years. Some of the earliest connections for Israeli-founded business were established with the help of the Jewish community, and continue to find fertile ground for new ventures with the help of their Boston brethren.<sup>37</sup>

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## A FRIEND IN TOUGH TIMES

April 15, 2013 was a dark day in Boston’s history. Two bombs at the Boston Marathon finish line killed three and injured 264. Like other moments in our history, however, terrible events can bring out the best in human spirit. First responders selflessly rushed in to help victims despite the possibility of secondary blasts, and Boston’s finest medical professionals saved every injured victim’s life, many of whom were critically hurt.

When asked what experience helped them during the tragedy and chaos, many of these professionals identified their prior training from Israeli experts. Dr. Alasdair Conn, chief of emergency services at Mass General Hospital, explained why he and his team were so well prepared: “About two years ago... we asked the Israelis to come across, and they helped us set up our disaster team so that we could respond in this kind of manner.” Beth Israel Medical Deaconess Center, which treated 24 of the injured, was also heavily influenced by Israel. The hospital’s CEO, Kevin Tabb, served and trained as a medic in the Israeli Defense Forces and dealt with numerous terrorist attacks and bombings during his residency at Israel’s Hadassah Hospital.

In the immediate aftermath of the bombing, MBTA Transit Police Superintendent Joseph O’Connor and Deputy Lewis Best credited their training in Israel with heightened performance

on that April day. Kurt Schwartz, director of the Massachusetts Emergency Management Agency, had similar praise, explaining that he learned in Israel about managing mass casualty events and providing immediate response to address post-traumatic stress. Even in the first command meeting on April 8, Schwartz quoted Boston Police Commissioner Ed Davis as saying “I learned in Israel that now is the time to show strength and talk about resilience and the importance of moving on with the business of Boston”. It is clear that within moments of the Marathon Bombings and hours after, many Boston officials tapped into their professional experiences in Israel.

This partnership was essential to recovery efforts as well, when six experts from the Israel Trauma Coalition for Response and Preparedness came to the city to assist with recovery strategies. Jason Del Porto, Vice Principal of Watertown Middle School, leveraged the team’s expertise to create a “coordinated synergetic coping and recovering process that [was] open to the entire community”. He added that the Israelis “brought it to a new level”.

The long-standing friendship—and instant response—between Massachusetts and Israeli emergency response professionals exemplifies the depth of connections between the two geographies. In Kurt Schwartz’s words, “On Marathon Monday, Israel was a true friend”.<sup>38</sup>

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## ISRAEL: A GLOBAL INNOVATION POWERHOUSE

Israel is well known as the “Start-Up Nation” for good reason.<sup>39</sup> Israel’s tech-success creates economic growth for itself and for companies and nations worldwide that have embraced its entrepreneurship and innovations. A few examples of Israel’s innovation expertise include:

- **Inventions that have changed the world.** Countless Israeli advances have achieved enormous global market acceptance and reshaped business and saved lives. Some of the most notable include: The “Israeli Bandage”, which stops bleeding from traumatic injury and is the “bandage of choice for the U.S. Army and special forces.” USB flash drives are the ubiquitous storage medium in briefcases and backpacks for in-person transfer of files. The network firewall was successfully commercialized by Checkpoint, and today tens of thousands of corporations and millions of consumers rely on the company’s products to protect them from hackers, phishers, and identity theft. Less earth-shattering inventions, but no less popular, have come from Israel too, such as Amazon Kindle’s Java platform, Apple’s iPhone and iPad memory chips, Epilady, Showtime’s Homeland, SodaStream, and Xbox Kinect.<sup>40</sup>
- **A steady stream of future game-changers.** A few examples give a sense of the breadth of radical innovations being created in Israel. The ReWalk bionic exoskeleton enables paraplegics to walk, and its users have even completed marathons in London and Tel Aviv. (The maker, Argo Medical, chose Massachusetts for its U.S. headquarters). BrightSource is building the world’s largest solar plant at 377 megawatts in California. The largest desalination plants in the world and in the Western Hemisphere are both being engineering by IDE Technologies, bringing drinking water to parched populations in unprecedented scale (with the U.S. plant financed by Boston-based Poseidon Water). And President Obama remarked, “You should talk to GM or Ford about this,” upon receiving a demonstration of a new car battery that extends mileage range to 3x existing batteries and has zero CO<sub>2</sub> emissions.<sup>41</sup>
- **Huge exits.** Israel has only a handful of mega-sized companies due to the country’s small home market, but this hasn’t prevented start-ups from attracting whopper-sized acquisitions. Some of the most notable purchases since 2012 include: Berkshire Hathaway’s acquisition of tool-maker Iscar in two transactions for a total of \$6 billion; Cisco’s embrace of cable encryption inventor NDS for \$5 billion; Google’s gobble-up of social media mapping company Waze for \$966 million; IBM’s buyout of cybercrime prevention firm Trusteer (which employs approximately 50 people in Boston) for \$800 million; Stratasys’ merger with 3D printing pioneer Objet Geometries (which employs approximately 20 people in Billerica, MA); and EMC’s pick-up of flash-memory groundbreaker XtremIO for \$450 million.<sup>42</sup>

M&A of Israeli-founded companies in 2013 is running at the highest pace in ten years, amounting to \$4 billion, equal to 20% of all 2013 acquisitions in America, an economy 25 times its size.<sup>43</sup>

- **Idea factories built by global tech titans.** 300 multinationals have engineering outposts in Israel. The list of them reads like a who’s who of the Global 500, including Apple, Cisco, Deutsche Telekom, EMC, GE, General Motors, Google, IBM, Intel, Microsoft, and Procter & Gamble. Many of

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these companies have chosen Israel as their sole innovation center outside their home countries. As an EMC Senior VP puts it, “In Israel, multinational acquirers have found high-performing teams solving complicated problems in sophisticated ways... [We have...] also found teams that share our most fundamental corporate mandates (integrity, absolute attention to customer needs, ability to execute, etc.)”<sup>44</sup>

- **World-class start-up fundraising.** 2013 is shaping up to be the best year since 2000, with 500 start-ups expected to raise about \$2 billion in venture capital. The pool of investors drawn to Israel is increasingly from foreign VCs, investments companies, and corporate arms—as high as 75% in some quarterly periods. The country has attracted over twice as much VC investment per capita as the U.S. and 30 times more than the entire European Union. An interesting example: Tel Aviv University alumni actually raise more money in average first-round funding from *American* venture capital than Harvard, Stanford, and MIT alums. And in a research study of 50,000 new companies worldwide, *Startup Genome* placed Tel Aviv as the #2 ecosystem for startups anywhere in the world.<sup>45</sup>
- **Research and academia at the backbone of invention.** Israeli civilian R&D expenditure is 5% of the country’s GDP, higher than any other western nation. It has the highest number of engineers, scientists, and PhDs per capita than any other country. The Nobel Prize has been awarded to twelve Israelis, an impressive number considering the country’s size, and that the prize has been awarded for almost 50 years before modern Israel was founded. And R&D doesn’t just stay in the lab. For example, the Weizmann Institute of Science has among the highest tech transfer revenue of any academic center worldwide, based on commercialization of research in areas such as multiple sclerosis treatment (Teva’s Copaxone), chemotherapy (ImClone’s Erbitux), and TV set-top box encryption (NDS’ VideoGuard).<sup>46</sup>
- **And a government that pushes innovation towards commercialization.** The Israeli government has a successful and enlightened policy for tech sector economic development through the Office of Chief Scientist at the Ministry of Industry, Trade, & Labor. For example, the Israel R&D Fund and the Technological Incubators program support dozens of pre-commercial companies and 18 business start-up hubs, each focused on verticals such as medical devices, water tech, new media, or CNS (central nervous system) innovations. These incubators—like Abital, BioLineRX, Incentive, Kinrot, Mofet, and The Time—commercialize ideas, launch products, and attract outside capital from companies like McCann Erickson (NY), Hutchison Whampoa, (Hong Kong) and the Maryland-Israel Development Council.<sup>47</sup>

The Israeli government has also demonstrated how foreign partners can be cultivated for bilateral economic development. Since its inception in 1977, the U.S-Israel Binational Industrial Research and Development Fund (BIRD) has fund over 800 projects between companies in the U.S. and Israel, spawning over \$8 billion in product revenue. The Israel Office of Chief Scientist has adapted the model over time to form similar partnerships with dozens of countries and individual U.S. states (with Massachusetts being the first U.S. state to fund and implement its agreement).<sup>48</sup>



## THE INTENSE COMPETITION AMONG U.S. STATES TO WIN ISRAELI BUSINESS

The state-level competition to attract immigrant entrepreneurs—and Israelis in particular—is aggressive and quickening. Why? Foreign expatriates who build or expand businesses in the U.S. are a significant driver of the American economy. According to a study by the Kauffman Foundation, over 24% of American business founded since 2006 in technology or engineering sectors were created by foreign-born executives.

While other states have not performed a study like the one presented in this whitepaper to quantify the impact of Israeli entrepreneurship on their economies, the Kauffman study did perform a state-by-state comparison. This survey found that Massachusetts has the top position, with Israeli entrepreneurs choosing the Commonwealth over all other states 44% of the time. California came in second at 25%, and NY at 13%, according to this study of over 100,000 immigrant-founded businesses.<sup>49,50</sup>

The frequency of Israeli-founders in Massachusetts companies is especially impressive when noting that Israel, with a population of only 8 million, is the second-most prevalent population of all immigrant entrepreneurs in the state, topped only by India, a country with a population of 1.2 billion. (See figure 9, “Countries of Origin for Massachusetts Tech Company Immigrant Founders”).<sup>51</sup>

To boost their attractiveness, many states are assertively and increasingly marketing themselves to Israeli-founded businesses:

- **16 governors have led trade delegations to Israel since 2010.** Maryland’s Martin O’Malley, New Jersey’s Chris Christie, and others use the trips to establish government-to-government agreements, promote business relationships, and create academic partnerships. (See figure 10, “Selected City & State Government Trade Missions to Israel, 2010-2013”).
- **Nine mayors also made the trek to promote their cities.** Chicago’s Rahm Emanuel, Houston’s Annise Parker, Miami’s Carlos Gimenez, and others market their cities on Israel trade missions with the same types of itineraries as the governors.
- **Follow-up agreements put skin in the game.** While Massachusetts was the first U.S. state that established a bilateral R&D grant program to promote business collaborations, other states are now putting up similar money to prime new opportunities. Florida’s program concentrates on aerospace, NY targets nanotech, and South Carolina focuses on six specific tech sectors.

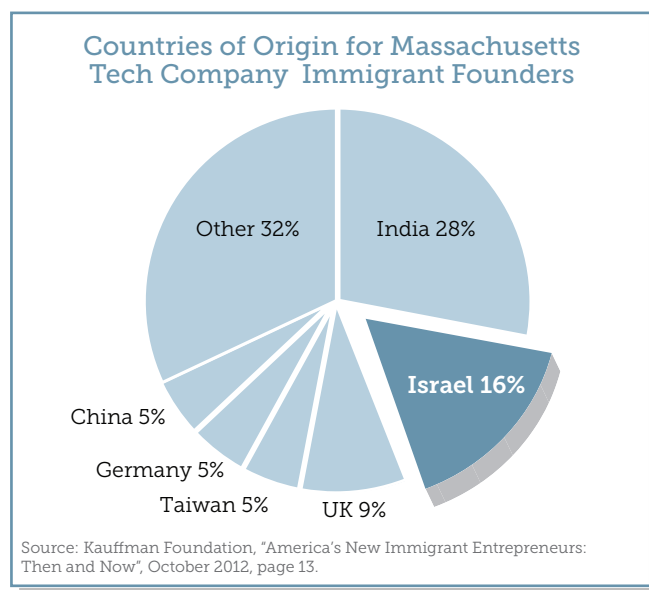


Figure 9

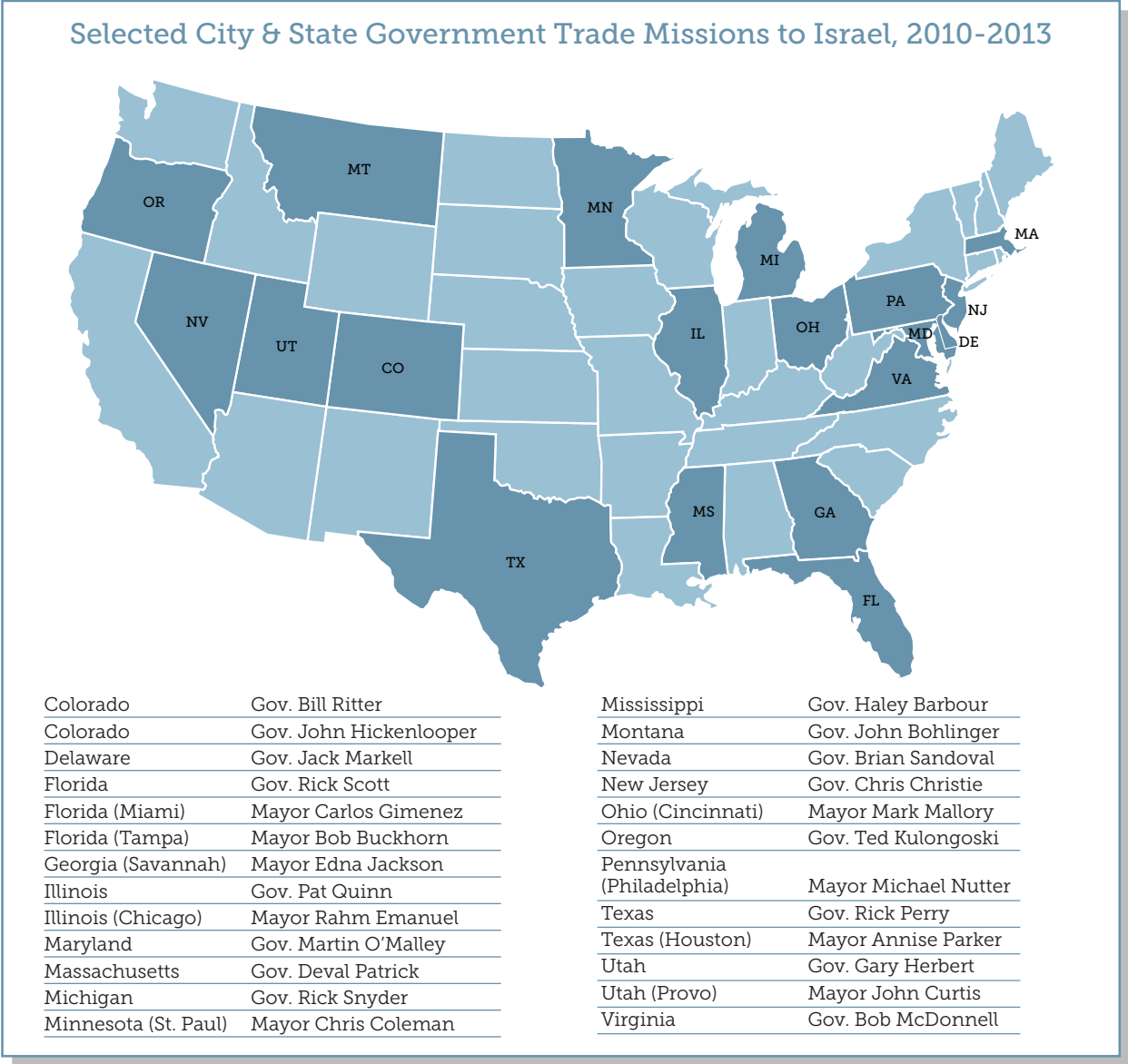


Figure 10

- Start-up accelerators focused on Israeli companies are opening up across the U.S.**

UpWest Labs offers a three-month program plus cash and accommodations for Israeli startups wanting to spend time in Silicon Valley. On the East Coast, DreamIt Israel offers Israeli entrepreneurs accelerator time in both Israel and New York City.<sup>52</sup> Star Farm Ventures, also offers free office space in NYC, plus up to \$400k in funding. Similar to MassChallenge Israel, these accelerators aim to help early-stage Israeli-founded companies succeed and take root in their geographies.
- New VC funds are raising money in the U.S. specifically to invest in Israeli start-ups.**

Across the USA, new VC funds are popping up to provide a vehicle for investors to bet on Israeli start-ups and help the portfolio companies expand into the U.S. market, often with a specific geographic focus. The Maryland-Israel Development Council -- a local trade association -- co-manages a fund with Israeli incubator Trendlines, focused on medical device companies. Pereg

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Ventures is Nielsen-backed venture fund based in NY investing in Israeli marketing companies. Blumberg Capital of Silicon Valley just completed raising capital for its third fund, targeting a broad range of Israeli opportunities, in an over-subscribed round of \$150m. Marker LLC secured \$41 million for a new NY-based fund to accelerate Israeli companies' entry to the U.S. market. LionBird of Chicago is deploying capital from a new fund specifically aimed at Israeli start-ups. And San Francisco's YL Ventures is now deploying its second fund "to bring the best of Israel to the U.S."

OurCrowd, the world's largest equity crowdfunding platform, has raised over \$25 million for 28 Israeli companies in its first year, bringing roadshows of portfolio companies to Boston, Chicago, NY, San Diego, and Washington DC, opening up the world of Israeli start-up investing to U.S. accredited investors for as little as \$10,000.

In South Carolina, even the government is getting into the act. SCRA Technology Ventures, an arm of the state, has begun making investments in Israeli companies, tied to a commitment to establish a presence there. In one case, the agency funded an Israeli company in exchange for a commitment to establish a South Carolina office, even after the company completed a clinical trial at Harvard.<sup>53</sup>

- **Conferences promoting U.S.-Israeli business are popping up all across the America.** NYC is rife with events, almost weekly, to bring companies, partners, and investors together, including the premier annual event, the *Israel Dealmakers Summit*, with 2013 luminaries including Jeffrey Immelt and Shari Redstone. For five years, the "godfather" of Israel tech Yossi Vardi has co-chaired a two-day "shmoozefest" of 600 attendees, the *Israel Conference* in Los Angeles, to divine the future of technology and U.S.-Israel business. And a new entrant this year, Mayor Rahm Emanuel opened the 2013 "Israel-Chicago Water Technology Forum." The list of networking events is long, the focus areas are diverse, and the number of U.S. cities hosting them is growing rapidly.<sup>54</sup>

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## RECOMMENDATIONS FOR THE FUTURE

The Massachusetts-Israel ecosystem has developed over years of relationship-building. To accelerate the mutual benefit and stay ahead of competitive geographies, new initiatives should concentrate on expanding current opportunities and indentifying new areas of common interest between the two geographies.

### INCREASE THE FLOW OF STUDENTS AND FACULTY IN BOTH DIRECTIONS

- **Babson, tops in entrepreneurship, can leverage closer ties with the Start-Up Nation.** U.S. News & World Reports scored Babson as the top school for entrepreneurship education in the USA, but it lacks programmatic offerings in the world’s leading entrepreneurship country. The college offers 30 “exchange programs” in 18 countries, plus an additional 56 “sponsored” programs in places such as Argentina, Botswana, and the Czech Republic—but none of either type in Israel.<sup>55</sup> To give students a flavor of why Israel is one of the world’s most successful entrepreneurial clusters, Babson can broaden from its popular course offering noted earlier, to create new student educational and internship opportunities in Israel, commensurate with the school’s well-deserved standing as the global entrepreneurship education leader.
- **Harvard Business School can teach Israeli business how to get big.** HBS knows the ropes in this area, but has yet to market an Executive Education offering of “Moving from Start-Up to Scale”. Israelis executives are a prime target audience—with the talent pool and motivation—to be among the first enrollees for such a program. The program can run in Cambridge, or like many other HBS EE programs, be piloted where the market is, right in Tel Aviv.
- **Harvard alumni can endow the “Israel Conference at Harvard.”** This highly-regarded 2011 conference featured ideas about innovations in technology, medicine, humanitarian aid, culture, and peace, by and for an esteemed audience. To ensure its continuity as a student-run affair and its influence, Harvard alumni with interest in the topic can build a board of supporters with the network and resources to make it *the* annual U.S. event that convenes American and Israeli thought-leadership on the future of innovation between the two economic partners.<sup>56</sup>
- **Brandeis can extend its leadership in Israel studies.** The school’s Schusterman Center broke new ground establishing Israel studies as a worthy academic endeavor. The program to train scholars can be extended to disciplines beyond the liberal arts to include the sciences and business, in order to explore and connect with this country’s accelerating history of global impact. Similarly, the successful collaboration with Ben Gurion University for student study abroad can be widened to include other post-secondary institutions, for example, with the Weizmann Institute in basic sciences, or Technion and Tel Aviv University in international business.
- **UMass has an opportunity to enrich the student body and invigorate the faculty.** The UMass system, with 5 campuses and over 70,000 students, enrolls over 2,500 international students, but few from Israel, as shown in the preceding Figure 3. Israeli students come to American

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universities with more experience than the average co-ed, having completed national military service and often some work experience before embarking on college. Quality and cost matter to them, and the UMass system can infuse a well-prepared, globally-focused contingent from Israel into the student body by recruiting Israeli grad students to the university's most important disciplines for growth, such as earth sciences and engineering. Similarly, faculty partnerships with Israeli peers—by tapping U.S.-Israel Binational Science Foundation (BSF) grants for example—can expand research horizons around business, environment, and the hard sciences.

- **Worcester Polytech can plant an Israeli hub around water tech and biomed.** WPI's strengths in applied science correspond closely to fields of expertise at Israeli academia. The Institute sends about 50% of its science and engineering students to 35 project centers around the world as part of its Global Perspectives program, but so far, none to Israel. To enable its students to plug into the world leader in water tech and medical device start-ups, WPI can ramp up affiliations with peers at Technion, Ben Gurion, or others.<sup>57</sup>
- **NEU can add entrepreneurship to its MBA foreign study requisite with an Israeli partner.** Northeastern's program aims to teach students about globalization by offering students a choice of study in Europe, China, Russia, or South America, with curricular focus areas in finance, developing economies, or brands. Adding entrepreneurship as field of foreign study can keep the school in sync with student interests, and selecting an Israeli university such as IDC, Technion, or Tel Aviv University would be a well-grounded choice. To get started, NEU may want to engage *Israel & Co*, an American non-profit that has assisted 40 MBA programs to establish experience-based education programs in Israel. In turn, the chosen partner school may want to designate NEU as its global field study partner, opening a path for Israeli students to land on Huntington Avenue.<sup>58</sup>
- **Israeli students in Massachusetts can lead their friends on a Trek.** With approximately 300 Israeli students in the state, a critical mass exists for some to take American friends home on an organized intersession trip to explore opportunity, culture, and other topics. These "Treks"—common occurrences at Harvard, MIT, and Wharton—are led by Israeli students and appeal to participants because student peers organize them. With planning help from the Consulate and other organizations, trek itineraries can visit the usual sites like the Western Wall and Tel Aviv beach—or even tailor a trip for specific interests, like entrepreneurship, robotics, or water technology—which can lead to forming lifelong connections relevant to academia or business.<sup>59</sup>
- **Israel can turn the tables on "brain drain".** Israeli society is rightly concerned with the loss of brainpower when its academics take positions abroad.<sup>60</sup> But imploring academics to stay put ignores the necessary free flow of ideas and talent, which is a key underpinning of the research discipline. Instead of counting only Israelis who hold research positions and professorships in Israel, universities can create "brain gain" programs to attract *foreign* academics to work in Israel, especially in fields with Israeli strength or investment. In particular:
  - Tel Aviv University or Technion—in partnership with Babson College—are obvious pairings for business faculty exchange or sabbatical years where American professors can learn first-

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hand about the Start-Up Nation, and share their expertise about cracking the U.S. market with future Israeli future entrepreneurs.<sup>61</sup>

- IDC's Lauder School, which organizes the Herzliya Conference—perhaps the world's leading security symposium—is a natural fit with the security and Middle East concentrations at Harvard's Kennedy School, the MIT's Security Studies Program, or Tufts' Fletcher School.
- The Arava Institute, Ben Gurion University, and Technion's Grand Institute would gain a global focus in alliance with Worcester Polytech's or UMass's leadership in energy, water, and environmental sciences.
- **TAMID can recruit college alumni to serve on advisory boards.** The Israel business clubs on campus have tapped a fertile ground of opportunity. To assist with making business connections and to ensure organizational sustainability beyond this year's leadership, Israel business clubs at Harvard, Brandeis, Tufts, and BU may want to recruit alumni of their universities who share their interests to serve on an advisory board which meets quarterly to interact with students on campus and support their mission with time and perhaps even funds.

## GOVERNMENT PUMP-PRIMING MAKES A DIFFERENCE

- **Massachusetts can maintain focus on establishing a non-stop flight.** Massport and Governor Patrick have been staunch champions of the BOS-TLV route. While the Authority can be expected continue to engage El Al as a desirable airline for the TLV-BOS route, Massport is also well-served by exploring other airline possibilities, especially as airline consolidation and global deregulation unfold.
- **Beacon Hill and industry together can find a formula to sustain the trade office in Israel.** Massachusetts has periodically had an Israeli trade office to promote the state as superior to other destinations for global expansion. But these nascent efforts have always been shuttered in challenging economic times. To stay ahead of California, NY, and international competitors like China and India, Massachusetts needs “boots on the ground” in Israel to make the case why Massachusetts should be the country's preeminent partner. As scores of Israeli start-ups attract new investment each year to expand globally, the Bay State can work this abundant list of pre-qualified prospects to make the Commonwealth pitch. In the absence of a single source for full government funding, the state can explore creative financing through a public-private partnership—using a combination of legislative or executive branch funds, plus business and philanthropic sources—as exemplified by the funding approach for Israel trade reps used by competitors in Maryland and Virginia.
- **Massachusetts government agencies can leverage BIRD.** From 1977 to 2001, Massachusetts companies received 12% of the total number of BIRD grants, or an average of 3.1 a year. Since then, the state has received around 7% of the grants or an average of 1.8 a year. Meanwhile, California business have received over 30% of these grants, and other states, like New Jersey, have begun to catch up to the Bay State. State quasi-public agencies and industry can add BIRD

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grants to their toolbox—the same way they promote other U.S. government grants from EPA, NSF, DoE and other agencies—to help Massachusetts companies score new funding.

- **MassVentures can connect with Israeli startups who are scouting Massachusetts.** This quasi-public corporation, formed by the state legislature, selectively funds new startups in the Bay State, and has already made minority investments in two companies founded or co-founded by Israelis in Massachusetts (uTest and Inside Tracker). Dozens more are considering the Commonwealth each year. MassVentures can raise its profile among Israeli-founded businesses to fund the pick of the litter, and cement their relationship to Massachusetts.
- **The state can enlist ambassadors to spread the Massachusetts story.** By asking community-minded VIPs from the state’s top business executives to do speaking tours in Israel, these ambassadors can attract attention to the Commonwealth, seed new relationships, and provide useful feedback for economic development.
- **MOTT can promote Massachusetts tourism in Israel.** Israelis are global vacationers, but the Commonwealth is not high on their destination list. This high-income, frequent flyer population could be attracted to the many cultural destinations and recreational opportunities in Massachusetts and New England if they knew about them. By promoting the Bay State’s sites, culture, and natural attractions, the Massachusetts Office of Travel & Tourism can draw known tourist dollars, help attract a non-stop route, and connect Israelis to the local business community.
- **The Israeli government can open the faucet on R&D funding.** The Office of Chief Scientist’s programs that promote commercial R&D have been widely recognized as a key driver of the Start-Up Nation’s success. But now that the payoffs are apparent, the Knesset has reduced funding.<sup>62</sup> To ensure that Israeli entrepreneurship addresses future market opportunities, the legislature can continue to co-fund early stage R&D where most private investors tread lightly. Without government participation, high-risk global capital will skip Israel in favor of China, USA, and South Korea in search of new commercial inventions in fields such as robotics, neuroscience, and nanotech.

## BUSINESS AND INDUSTRY ASSOCIATIONS CAN GRAB NEW OPPORTUNITIES

- **Boston and Israeli business leaders can run a boot camp on “scaling up.”** A copious number of incubators have been quite successful launching Israeli start-ups. But training for later-stage business strategy is lacking. Groups like the New England Venture Capital Association, the industry association Israeli Advanced Technology Industries (IATI), and the Israeli-America Chamber of Commerce can take the lead on organizing educational programs or seminars for Israeli business executives to tap into the wealth of U.S. experience in this area, drawing on experts from Boston-area titans like Akamai, EMC, Harvard, MIT, and others. The result can help Israeli business build bigger companies at home and command larger returns for investors when they exit, while giving the U.S. organizations increased visibility among promising entrepreneurs.

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- **athenahealth, Harmonix, HubSpot, Staples, & TripAdvisor can scout Israeli innovation.** The Israeli tech sector has proven brainpower in sectors that are key to many of Massachusetts leading employers and growth companies—like eHealth, digital games, marketing software, eRetail, and eTravel. With Amazon, Google, and 300 other top tech titans running innovation outposts in Israel, these Commonwealth companies would be well served by conducting on-the-ground reconnaissance in Israel, to identify potential acquisitions, licensing partners, or perhaps even establish their own beachheads in the Start-Up Nation.
  - **Fidelity, MFS, Putnam, et al can take a cue from Citi by seeding an innovation lab in Israel.** To stay on top of the rapid pace of change in fintech, Citicorp opened a Technology Innovation Lab in Israel in 2013, with special emphasis on customer-facing apps, data analysis, risk management software, and automated trading. Similarly, Bank Leumi and The Elevator started a fintech incubator for a total investment across an entire portfolio of start-ups of \$2 million. These Massachusetts financial powerhouses—representing a \$36 billion industry in the state—can tap into the latest fintech advances by making regular visits to Israeli startups, or perhaps even following Citi’s and Leumi’s strategy and opening up an Israeli innovation lab.<sup>63</sup>
  - **AIM, MassBio, MassMEDIC, MasTLC, MHTC, MITX, and NECEC can tap new membership.** This alphabet soup of the state’s best trade associations can target Israeli-founded businesses in Massachusetts as potential new members, helping them to succeed in the Commonwealth. To go a step further, these economic development non-profits can partner with NEIBC and others to host visiting Israeli trade delegations, as well as co-organize trade missions to Israel to tell the Commonwealth story and attract new partners.
  - **Massachusetts industry associations can open doors to students while they’re here.** With their proven record of starting or expanding businesses into Massachusetts, foreign students are eager to soak up all the connections they can while staying in the Bay State. To grab this opportunity, trade associations like MasTLC and MassBio can organize a schmooze-fest or business fair to educate Israelis (and other visiting foreign students) about the riches of the Bay State and help them to network with previous successful entrepreneurs, community-minded VCs, senior business leaders, and government officials.
  - **Start-up organizations can sponsor Israeli Entrepreneur Night.** By inviting Israeli students studying in Massachusetts to network with accomplished Israel entrepreneurs in Boston, organizations like MassChallenge, Cambridge Innovation Center, TechStars, and Greentown Labs can bring the Bay State ecosystem alive for these future founders. In turn, these organizations may become preferred destinations for Israeli alumni of Massachusetts when they’re ready to expand their businesses into the U.S.
  - **Raise the perception of Massachusetts up to the reality.** Despite Massachusetts earning top-tier global rankings as an innovation economy, Boston is often perceived as a second-class city, well behind Silicon Valley and NYC. As a TechStars investor explains, “Boston appears undifferentiated only because it is not the consumer Internet leader, [and] therefore not top of mind in the popular press. The diversity of ... clusters in Boston ... make the storytelling diffuse and more difficult.”<sup>64</sup>



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Many leaders and organizations have given significant, serious time to marketing the local economy, most notably including Governor Patrick and leading CEOs. And indeed, their efforts have been well appreciated both inside and outside the state, which was specifically recognized by interviewees for the Stax Inc. research. But the perception gap remains just as wide, partly because other geographies are not standing still.

- To break from the pack, industry and government can embark on specific objectives to deliver a sustained messaging out-of-state—via business missions, trade show participation (in established and newer industries), seed programs, marketing activities, trade reps abroad and most importantly, organized follow-up.
- Developing a brand for the Boston-centered innovation-economy—like “Silicon Valley” or Israel’s “Start-Up Nation”—would also help communicate the state’s depth and diversity in idea-generation, commercialization, talent, and capital. From being the cradle of the American Revolution to the home of DNA decoding, perhaps Massachusetts is the “Revolutionary Republic” (or insert your best idea here.)
- **Law firms can get in the game earlier.** The competition among blue-chip law firms to win business from top Israeli start-ups is intense. What can Massachusetts law firms do to win billables from the cream-of-the-crop? Because Israeli companies think globally from the outset, and often launch U.S. operations very early, the key is to build relationships when companies are in their formative stages. This effort can span from sending a rotation of partners on Israeli speaking tours and scouting trips, to establishing an Israeli marketing office like Greenberg Traurig and Mintz Levin, or even opening or acquiring an Israeli law practice to deliver legal services on both sides of the pond, now that the Israel industry is deregulated.
- **El Al can capture profitable revenue now in Boston.** The Israeli airline has been distracted from strategic expansion due to labor disputes, ICAO recertification, and the potential sale of the carrier. These events have also unfortunately served to cede opportunity for premium-fare revenue growth.<sup>65</sup> For El Al to realize its vision of sustained independence and profitability, it must transform from a tourist-oriented airline into a higher-fare “Start-Up Nation” carrier that embraces the needs of business clientele by serving the country’s most important economic partners with non-stop service and amenities. In Boston, El Al can serve this key business-focused market, and avoid encountering non-stop competition in hub cities operated by Delta, United, and American. In addition, by partnering with JetBlue, El Al can capture U.S.-bound connecting traffic to 50 destinations from Logan, allowing its customers to shorten their total flight durations and bypass the congested, unpleasant JFK-EWR corridor.

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## CONCLUSION: EMERGING TECHNOLOGIES CAN MULTIPLY THE GROWTH

The Massachusetts-Israel economic relationship is stronger than ever before, built on a history of collaboration and mutual benefit. Looking ahead,

- **The Massachusetts-Israel economic relationship is healthy and growing rapidly.** With billions in revenue, billions in capital transactions, and thousands of jobs—which are increasing faster than the overall economy—the Massachusetts-Israel partnership is robust, and its benefits accrue to both sides.
- **But competition is crowding out the Massachusetts story, and warrants response.** As more attention is being paid across the USA to building relationships with Israeli business and academia, other geographies are gaining ground over Massachusetts. To regain the status of preeminent partner, Massachusetts and its senior executives in business, government, and academia can seek opportunities to tell the state’s story on-the-ground in Israel, via trade missions, industry conferences, academic symposia, one-on-meetings, marketing campaigns, and other vehicles.
- **Business, government, and academia each have significant opportunities to pursue.** The recommendations in the preceding section describe a few ideas for creating new economic benefits for specific organizations. But it’s not an exhaustive list. Each organization is best served by charting its own path, based upon its own needs, interests, and capacities. Those interested in developing access to Israeli innovation and entrepreneurship will find willing partners in NEIBC, CJP, the Israeli Consulate, and others, who can assist with defining an approach and making valuable connections.
- **New industries are the pathway to accelerating the pace of growth.** Beyond the impressive measures of the current relationship, the future opportunity is even greater. As knowledge-based economies, both Israel and Massachusetts ride the wave of technology progress. In addition to paying attention to ongoing opportunities in today’s core disciplines of life sciences and IT, newer sectors with grounding in both geographies are also worthy of emphasis today, such as 3D printing, cyber-security, eHealth, energy and water, fintech, gene mapping, homeland security, nanotech, neuroscience, personalized medicine, and robotics.

Together, the two geographies will continue to grow faster together by leveraging the ideas, talent, capital, and market access of the other.

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## APPENDIX: METHODOLOGY

The methodology for the Stax Inc. study is based on an analysis of company founders first performed and later updated at MIT<sup>66</sup>, and also at Stanford University<sup>67</sup>.

The Stax Inc. research was performed in 2010 and 2013. The periods of study were 2009 and 2012 respectively, described in detail as follows. In 2013, Stax Inc. employed over 300 hours to perform this research.

### PERIOD OF STUDY

Revenue and employee information for this study was collected for 2012. In addition, data previously collected for 2009 was updated to account for more recently available information regarding that period, and to apply stricter inclusion criteria.

Student information was collected for 2012.

Capital activity information was collected for 2010, 2011, and 2012.

### INCLUSION CRITERIA

A company or division was considered to be an “Israel-founded business” and qualified for inclusion in the study if it met one or more of the following criteria:

1. A company founded in Israel, which opened an office in Massachusetts.
2. A company founded in Israel, which relocated to Massachusetts.
3. A company founded in Massachusetts by an Israeli<sup>68</sup>.
4. A company founded in Israel, or in Massachusetts by an Israeli, which was later acquired by a Massachusetts company<sup>69</sup>.
5. A company in Massachusetts that was acquired by an Israeli company.
6. A company in Massachusetts that has an identifiable product based on Israeli intellectual property<sup>70</sup>.

### RESEARCH SOURCES

Stax Inc. employed a variety of primary and secondary data sources to:

- discover a list of potential companies for inclusion;
- determine which companies met the inclusion criteria;
- gather revenue, employee counts, and capital activity for each qualified company;
- calculate key ratios, such as industry multipliers, and percentages of Massachusetts GDP, employment, and capital transactions;
- count Israeli students at Massachusetts institutions of higher education.

To discover the universe of potential companies for inclusion, Stax Inc. had assistance from the New England-Israel Business Council, the Consulate General of Israel to New England, and the State of Israel’s Ministry of Industry and Trade, and made postings to request help on various Israel-related LinkedIn groups.

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Primary sources of company data, which were considered to be authoritative sources of numerical data, included:

- 49 in-depth interviews with founders and CEOs of qualifying firms;
- 25 additional calls with management at qualifying firms;
- SEC filings;
- Company annual reports, press releases, and websites; and

Primary sources accounted for:

- 93% of revenue reported;
- 75% of employees reported;
- 100% of capital activity reported; and
- 100% of students reported.

Secondary sources of company data, which were considered to be estimated sources of numerical data, and were corroborated with other sources whenever possible, included:

- News stories from business and industry publications, including Bloomberg, Boston Business Journal, Boston Globe, Business Week, Forbes, Globes (Israel), HealthCare IT News, Israel21C, TechCrunch, Venture Beat, Xconomy, and others.
- LinkedIn;
- Industry reports;
- Online databases (CrunchBase, Hoovers, LoopNet, and Zoominfo).

To calculate key ratios, Stax Inc. employed data from:

- RIMS II (Regional Input-Output Modeling System), as provided by the U.S. Bureau of Economic Analysis, applying to each company the best fit of 14 different Massachusetts- and industry-specific multipliers;
- U.S. Bureau of Labor Statistics;
- U.S. Census Bureau; and
- “Venture Capital & Entrepreneurship in Massachusetts,” National Venture Capital Association.

Primary sources for student data included:

- “International Student Totals by Place of Origin, 2010/11 - 2011/12,” in the *Open Doors Report on International Educational Exchange*, from the Institute of International Education.
- University websites; and
- 6 interviews with Israeli student organization leaders in Massachusetts.

## ACCOUNTING FOR REVENUE

Revenue included was for calendar year 2012. When specific calendar year 2012 data was unavailable, for example, due to differences between fiscal and calendar years, an approximation was used.

Revenue was included in the study based on the following criteria:

- 1) For firms with only a Massachusetts location, all revenue was counted.
- 2) For firms globally headquartered in Massachusetts, all revenue was counted.

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- 3) For firms with U.S. headquarters in Massachusetts, but global headquarters elsewhere, only U.S. revenue was counted.
  - 4) For firms with a Massachusetts office, but not the U.S. or global headquarters, no revenue was counted.

For the comparison between 2012 and 2009 revenue, the cohort of companies identified in the earlier study by Stax Inc. was used as the basis of comparison. Revenue figures for 2009 were updated if better information was available. For the comparison to 2012, new companies that met the study's inclusion criteria were added, and companies that left Massachusetts or failed during the study period were deleted, so that the compound annual growth rate (CAGR) as reported reflects just net growth.

### **Accounting for Employees**

Employment was counted as of year-end 2012. When specific year-end 2012 data was unavailable, for example, due to differences between fiscal and calendar years, an approximation was used.

All employment in Massachusetts was counted, regardless of where the company was headquartered.

For the comparison between 2012 and 2009 employees, the cohort of companies identified in the earlier study by Stax Inc. was used as the basis of comparison. Employment figures for 2009 were updated if better information was available. For the comparison to 2012, new companies that met the study's inclusion criteria were added, and companies that left Massachusetts or failed during the study period were deleted, so that the growth rate as reported reflects just net growth.

### **Accounting for Capital**

Capital activity was counted for the period January 1st, 2010 through December 31st, 2012.

All types of long-term of capital activity were counted, including M&A, equity, grants, and long-term or revolving debt. Short-term debt was excluded.

For companies with offices both inside and outside Massachusetts, capital activity was counted based on the proportion of revenue allocated to that company's Massachusetts presence. (See the section "Accounting for Revenue" above to determine inclusion criteria.)

Regarding M&A, the value of a transaction was counted:

- Only if the acquired company had its U.S. or global headquarters in Massachusetts.
- At the reported market total value of the transaction, regardless of the structure of the deal, e.g. percentage of equity or cash.

In addition to the company inclusion criteria for revenue and employment described at the top of this section, one additional criterion was included for capital: Any Massachusetts-based company, regardless of who founded it, was included when it raised capital from an Israel-based entity.

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  - Ken Brown / VP
  - Alex Goldstein / VP
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- Pam Goldberg / CEO, Massachusetts Tech Collaborative
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- Nadav Tamir / former Consul General to New England, State of Israel
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For more information or a copy of the Stax Inc. research findings, contact Adi Golani / Executive Director, NEIBC: [adi@neibc.org](mailto:adi@neibc.org).

To contact the author of this whitepaper, David Goodtree, please connect via LinkedIn: [www.linkedin.com/in/dgoodtree](http://www.linkedin.com/in/dgoodtree)

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## ENDNOTES

- 1 Roberts, Edward B., and Charles Easley, *Entrepreneurial Impact: The Role of MIT*, Kaufmann Foundation, 2009. Updated in 2011, *Foundations and Trends in Entrepreneurship*, Vol 7, Issue 1-2, 2011, pp 1-149. See <https://entrepreneurship.mit.edu/about/entrepreneurial-impact-report/>.
- 2 All data presented in this section of the whitepaper, unless otherwise noted is from the Stax Inc. research findings.
- 3 Massachusetts GDP in 2012 was \$403.8b, per <http://research.stlouisfed.org/fred2/series/MANGSP?rid=140>. Direct and indirect revenue by the qualifying companies in the study produced \$11.9b in 2012, which amounts to a 2.9% share.
- 4 Source: <http://www.mass.gov/export/pdf/MA%20exports%202011%20by%20country.pdf>
- 5 Although the investments attracted by these companies can be deployed in any of their locations – Massachusetts, Israel, or elsewhere – to properly account for their impact on the Commonwealth, transaction value is allocated based on the proportion of revenue estimated to have been generated by each company’s Massachusetts operations.
- 6 In figure 7 of “Selected Acquisitions”, some of the transactions shown were not included in the reported amount of \$1.9b of acquisitions during the study period of 2010-2012. While these excluded transactions are noteworthy because of the current or potential role producing revenue in Massachusetts, they may not have met the criteria of inclusion for acquisition value, as described in the Appendix, because they occurred prior to 2010, or because the acquired company did not have a Massachusetts presence as global or U.S. headquarters.
- 7 Of 152 founders for whom post-secondary information is available, 45 attended a Massachusetts college as an undergrad or graduate student, or post-doc. Andrew Savage performed the analysis of founders’ post-secondary education.
- 8 Additional Israeli-founded companies in Massachusetts have been acquired by non-Massachusetts companies, but maintained their Massachusetts presence post-acquisition, such as Oracle’s acquisition of Demantra, or IBM’s acquisition of Emptoris.
- 9 EMC’s acquisitions of Israeli-based companies include: Cyota (through its acquisition of RSA Security in 2005), Kashya (2006), nLayers (2006), proActivity (2006), Illuminator (2007), Zettapoint (2011), XtremIO (2012), More IT (2012), and ScaleIO (2013).
- 10 In testament to the importance of Yanai’s technology leadership, in 2001 EMC named him a “Founder”, 22 years after the company was first formed. <http://www.emc.com/about/news/press/us/2001/20011129-1164.htm>
- 11 Atkinson, Robert D., and Scott Andes, *The 2012 State New Economy Index: Benchmarking Economic Transformation in the States*, The Information Technology and Innovation Foundation, November 2012, <http://www2.itif.org/2012-state-new-economy-index.pdf>.
- 12 Key data in the bullets is drawn from:  
*Annual Index of the Massachusetts Innovation Economy*, Massachusetts Tech Collaborative, December 2012, <http://www.masstech.org/research-and-analysis/innovation-index>  
Bussgang, Jeffrey, *What Makes Boston’s Start-Up Scene Special?*, Fall 2013, <http://bostonvcblog.typepad.com/>
- 13 For the state-by-state comparisons; see <http://www.ed.gov/news/press-releases/new-state-state-college-attainment-numbers-show-progress-toward-2020-goal>  
For the top ten cities in the USA, see <http://www.nerdwallet.com/blog/2013/educated-places-america/>. The Massachusetts cities with the highest-rate of educational attainment are: Brookline, Needham, Newton, and Wellesley.
- 14 Data from this section comes from:  
- *ibid Annual Index of the Massachusetts Innovation Economy*  
- *QS World University Rankings*, [www.topuniversities.com](http://www.topuniversities.com)  
- College Board, via [www.businessinsider.com](http://www.businessinsider.com)  
- *Best College Rankings, U.S. News & World Reports*, <http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings>
- 15 Sources for the information in this paragraph come from the websites of:  
Massachusetts Biotechnology Council ([www.massbio.com](http://www.massbio.com))  
Massachusetts Life Sciences Center ([www.masslifesciences.com](http://www.masslifesciences.com))



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- 16 Sources for information in this paragraph come from:  
 Mass Technology Leadership Council (MassTLC) ([www.masstlc.org](http://www.masstlc.org))  
 Jeff Bussgang, “What Makes the Boston Start-Up Scene Special?”, Fall 2013  
 ([bostonvcblog.typepad.com/vc/2013/09/what-makes-the-boston-start-up-scene-special.html](http://bostonvcblog.typepad.com/vc/2013/09/what-makes-the-boston-start-up-scene-special.html))  
 “Big Data and Analytics: A Major Market Opportunity for Massachusetts,” MassTLC,  
 (76.12.40.240/research/MassTLC\_BDR.pdf)
- 17 *Massachusetts Clean Energy Industry Report 2013*.  
 Prepared for the Massachusetts Clean Energy Center by BW Research Partnership.  
[http://images.masscec.com/uploads/attachments/2013/09/MassCEC\\_2013\\_IndustryRpt.pdf](http://images.masscec.com/uploads/attachments/2013/09/MassCEC_2013_IndustryRpt.pdf)
- 18 Cleantech Group, *2013 Global Cleantech 100: A Barometer of the Changing Face of Global Cleantech Innovation*.  
<http://www.cleantech.com/global100/global-cleantech-100/>
- 19 Macres, Eric, et al, *The 2013 City Energy Efficiency Scorecard*, September 2013, American Council for an Energy-Efficient Economy. <http://aceee.org/research-report/e13g>.
- 20 *ibid Massachusetts Clean Energy Industry Report 2013*.
- 21 Goodtree, David, *Massachusetts Water Industry*, as delivered at the “Symposium on Water Innovation in Massachusetts,” May 2012. <http://www.slideshare.net/dgoodtree/massachusetts-water-industry>  
 See also:  
*Massachusetts Water Industry Market Map*, a 2’ x 3’ poster representation of the state’s water industry, at  
<http://www.slideshare.net/dgoodtree/ma-water-industry-market-map>  
 and  
 Goodtree, David, *The Other Side of Water*, (video presentation), TEDxBoston, June 2012.  
<http://www.youtube.com/watch?v=NBWd36D1hqU>
- 22 [www.wet-revolution.com](http://www.wet-revolution.com)
- 23 To stay on top of Boston-area start-up news and resources, see:  
 BostonInno—[bostinno.streetwise.co](http://bostinno.streetwise.co)  
 Greenhorn Connect—[greenhornconnect.com](http://greenhornconnect.com)  
 VentureFizz—[venturefizz.com](http://venturefizz.com)  
 Xconomy—[www.xconomy.com/boston/](http://www.xconomy.com/boston/)
- 24 Based on comparison of all flight options presented at [www.google.com/flights](http://www.google.com/flights) for originations from SFO and BOS to TLV for October 17, 2013, as searched on September 19, 2013.
- 25 Source: <http://www.cityrating.com/costofliving.asp>
- 26 Drenkard, Scott, and Joseph Henschman, *2014 State Business Tax Climate Index*, Tax Foundation, October 2013.  
<http://taxfoundation.org/article/2014-state-business-tax-climate-index>
- 27 The Edward Devotion Elementary School—which U.S. President John F. Kennedy attended—is a public school in Brookline that serves kindergarten through 8th grades, and offers Hebrew language instruction due to the significant concentration of Israelis in this town [www.devotionschool.org](http://www.devotionschool.org).  
 Private schools which offer modern Hebrew instruction as a standard part of their curricula for kindergarten through 8th grade include:  
 • The Solomon Schechter Day School of Greater Boston in Newton [www.sdsboston.org](http://www.sdsboston.org)  
 • The Rashi School in Dedham [www.rashi.org](http://www.rashi.org)  
 • JCDS in Watertown [www.jcbsboston.org](http://www.jcbsboston.org), and  
 • Kehillah Schechter Academy in Norwood [www.ksa-ne.org](http://www.ksa-ne.org).  
 Gann Academy in Waltham is a private high school for grades 9-12 which also offers modern Hebrew instruction as part of its curriculum [www.gannacademy.org](http://www.gannacademy.org).  
 The Israeli Complementary School in Brookline offers after-school Hebrew instruction for kindergarten through 8th grade. [www.boston-ics.org](http://www.boston-ics.org)
- 28 See the following links for connections to some of these organizations in Massachusetts focused on Israeli connections:  
 • The New England-Israel Business Council  
[www.neibc.org](http://www.neibc.org)
-

- BIG (The Boston Israel Group)  
[www.bostonisraelgroup.org](http://www.bostonisraelgroup.org)
  - American Technion Society [www.ats.org/site/PageServer?pagename=chapters\\_new\\_england](http://www.ats.org/site/PageServer?pagename=chapters_new_england)
  - BioAbroad  
[www.bioabroad.org.il](http://www.bioabroad.org.il)
  - American Friends of Tel Aviv University [www.aftau.org/site/PageServer?pagename=alumni\\_boston](http://www.aftau.org/site/PageServer?pagename=alumni_boston)
  - The Consulate General of New England's "Israeli Executive Forum" [embassies.gov.il/boston/Departments/Pages/economic-affairs.aspx](http://embassies.gov.il/boston/Departments/Pages/economic-affairs.aspx)
  - Massachusetts-Israel Network  
[www.linkedin.com/groups/MassachusettsIsrael-Network-4695570](http://www.linkedin.com/groups/MassachusettsIsrael-Network-4695570)
- 29 In Massachusetts:
- For the energy and water grant program, see the Massachusetts Clean Energy Center at [www.masscec.com/miip](http://www.masscec.com/miip)
  - For the life sciences grant program, see the Massachusetts Life Sciences Center at [www.masslifesciences.com/news/announcements/second-round-success-massachusetts-and-israel-continue-to-support-rd-collaborations-in-the-life-sciences/](http://www.masslifesciences.com/news/announcements/second-round-success-massachusetts-and-israel-continue-to-support-rd-collaborations-in-the-life-sciences/)
  - For the health IT grant program, see the Massachusetts Technology Collaborative at [www.masstech.org/massachusetts-israel-innovation-partnership](http://www.masstech.org/massachusetts-israel-innovation-partnership).
- In Israel, for all three grant programs with Massachusetts, see MATIMOP, on behalf of the Israeli Office of Chief Scientist, at [www.matimop.org.il/usa\\_massachusetts.html](http://www.matimop.org.il/usa_massachusetts.html)
- 30 Schusterman Center for Israel Studies: <http://www.brandeis.edu/israelcenter/index.html>  
 Jellyfish online resource for Israel Studies:  
<http://israelresources.brandeis.libguides.com/content.php?pid=25580>  
 bView: <https://www.facebook.com/brandeisview>  
 BIPAC: <http://brandeisbipac.wix.com/bipac>  
 For the Brandeis TAMID website, see: <http://tamidbrandeis.tumblr.com/>  
 About Justice Louis Brandeis and Israel: <http://www.jewishfederations.org/page.aspx?id=53583>
- 31 <http://www.broadinstitute.org/scientific-community/science/programs/cell-circuits/klarman-cell-observatory/broad-institute-israel->
- 32 Babson course description:  
[http://educationabroad.babson.edu/index.cfm?FuseAction=Programs.ViewProgram&Program\\_ID=10125](http://educationabroad.babson.edu/index.cfm?FuseAction=Programs.ViewProgram&Program_ID=10125)
- 33 A write-up of the WPI course: <http://innovationstationblog.com/tag/wpi/>
- 34 Boston University programs at Tel Aviv University: <http://www.bu.edu/abroad/programs/tel-aviv-engineering-program/> and <http://www.bu.edu/law/prospective/jd/abroad/tel-aviv.html>
- 35 The national TAMID website is: [www.tamid.com](http://www.tamid.com). Also see [http://en.wikipedia.org/wiki/TAMID\\_Israel\\_Investment\\_Group](http://en.wikipedia.org/wiki/TAMID_Israel_Investment_Group).
- For the Brandeis TAMID website, see: <http://tamidbrandeis.tumblr.com/>
- 36 About the Wexner Fellowship: [http://www.centerforpublicleadership.org/index.php?option=com\\_content&view=article&id=349&Itemid=199](http://www.centerforpublicleadership.org/index.php?option=com_content&view=article&id=349&Itemid=199)
- About MAOZ-Seal: <http://www.seal.org.il/>
- About the Ruderman Fellows: <http://rudermanfoundation.org/israel-diaspora/>
- 37 Data from this section is sourced from:  
 Saxe, Leonard, et al, *The 2005 Boston Community Survey: Preliminary Findings*, November 2006, Brandeis University / The Steinhardt Social Research Institute, <https://bir.brandeis.edu/bitstream/handle/10192/23002/Boston%20Study%20March%20Revision.pdf?sequence=1>
- 38 Sources for this section include:
- Israel trained team responded to Boston attack*, The Times of Israel,  
<http://www.timesofisrael.com/israel-trained-medical-team-responded-to-boston-attack/>
- Lebovic, Matt, *Israeli Team Helps Boston Fight Back Against Trauma*, The Times of Israel,  
<http://www.timesofisrael.com/israeli-team-helps-boston-plan-attack-on-trauma/>
- <http://www.youtube.com/watch?list=UUtbY2J8Pffrj6M5JlKePozQ&v=Ci3CFiZ7O5g>

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<http://www.algemeiner.com/2013/04/15/boston-marathon-blasts-doctor-credits-israelis-with-helping-set-up-disaster-team-video/>

<http://www.thedenverchannel.com/lifestyle/health/combat-medicine-lessons-from-iraq-afghanistan-applied-to-boston-marathon-wounded>

Presentations delivered at the AIPAC New England Leadership Dinner in Boston on June 3, 2013, including comments made by Kurt Schwartz, director of the Massachusetts Emergency Management Agency.

- 39 The best-selling book, *Startup Nation*, by Dan Senor & Saul Singer, was appeared on bestseller lists in *The New York Times* and *The Wall Street Journal*, and has been translated into twenty languages.
- 40 The Emergency Bandage is manufactured by First Care (<http://firstcareproducts.com/>) and its technology and market acceptance are described at [http://en.wikipedia.org/wiki/Emergency\\_Bandage](http://en.wikipedia.org/wiki/Emergency_Bandage).

About USB flash drives and their Israeli inventors:

<http://nocamels.com/2013/03/dov-moran-talks-to-nocamels-about-sandisk-comigo-modu/>  
and [http://www.usbmemorydirect.com/news/overview\\_of\\_usb\\_flash\\_drives.htm](http://www.usbmemorydirect.com/news/overview_of_usb_flash_drives.htm)

Blackburn, Nicky, *The Top 64 Innovations Developed in Israel*, Israel21c, April 22, 2012,  
<http://israel21c.org/technology/innovation/made-in-israel-the-top-64-innovations-developed-in-israel/>

Shamah, David, *Amazon Kindle: A Made in Israel Story*, Israel21c, December 16, 2010,  
<http://israel21c.org/technology/amazons-kindle-a-made-in-israel-story-2/>

Shamah, David, *True 3D Play Is Only Months Away*, Israel21c, June 7, 2010,  
<http://israel21c.org/technology/true-3d-play-is-only-months-away-2/>

- 41 Regarding the technologies introduced to President Obama during his 2012 visit to Israel, see <http://www.israelnationalnews.com/News/News.aspx/166456> and <http://www.thedailybeast.com/articles/2013/03/21/snake-robots-alternative-fuel-more-highlights-from-obama-s-visit-to-the-israel-museum.html>

ReWalk is made by Argo Medical Technologies of Yokneam, Israel and Marlborough, MA. <http://rewalk.us/>

- 42 Alspach, Kyle, Trusteer, *Fraud Protection Firm for BofA, on Hiring Spree*, Boston Business Journal, March 5, 2013,  
<http://www.bizjournals.com/boston/blog/startups/2013/03/trusteer-bank-of-america-security-fraud.html>.

Objet Geometries' employee count in Billerica, MA is derived from a count of current employees of Stratasys at this location with profiles at [www.linkedin.com](http://www.linkedin.com).

Wikipedia's entry for ISCAR Metalworking at [http://en.wikipedia.org/wiki/ISCAR\\_Metalworking](http://en.wikipedia.org/wiki/ISCAR_Metalworking)

- 43 *E&Y: Israeli M&As Hit 10-Year High*, Globes, October 17, 2013, <http://www.globes.co.il/serveen/globes/docview.asp?did=1000886562>

*Top 10 Israeli Exits, Mergers, & Acquisitions of All Time*, No Camels, October 29, 2013,  
<http://nocamels.com/2013/10/top-10-israeli-exits-mergers-aquisitions-of-all-time/>

- 44 Olton, Matthew, *Israel Is On Track To Have the Highest Rate of M&A Since 1994*, Quartz, November 4, 2013,  
<http://qz.com/142043/israel-is-on-track-to-have-the-highest-rate-of-ma-since-1994/>

- 45 *Start-Up Investment Hits 13-Year High*, Globes, October 15, 2013,  
<http://www.globes.co.il/serveen/globes/docview.asp?did=1000885898>

Empson, Rip, *Startup Genome Ranks The World's Top Startup Ecosystems*, TechCrunch, November 20, 2012,  
<http://techcrunch.com/2012/11/20/startup-genome-ranks-the-worlds-top-startup-ecosystems-silicon-valley-tel-aviv-l-a-lead-the-way/>

Woolf, Max, *Which Universities Produce the Most Start-Up Founders?*, July 20, 2013,  
<http://minimaxir.com/2013/07/alma-mater-data/> (See graphic: "Which university's graduates raise the most amount of money in their first round of funding on average?")

- 46 Abrar, Peerzada, *What Makes Israel, with Just Eight Million People, an Innovation Hub*, Economic Times, November 8, 2013, [http://articles.economictimes.indiatimes.com/2013-11-08/news/43822483\\_1\\_scientist-innovation-private-sector](http://articles.economictimes.indiatimes.com/2013-11-08/news/43822483_1_scientist-innovation-private-sector)

Rome, Henry, *Israel's Twelve Nobel Laureates*, Jerusalem Post, October 10, 2013,  
<http://www.jpost.com/National-News/Israels-twelve-Nobel-laureates-328320>

- 
- 47 A list of the government license incubators can be found at:  
<http://www.incubators.org.il/article.aspx?id=1608&catid=1982>
- 48 About BIRD: <http://www.birdf.com/?CategoryID=317&ArticleID=374>  
  
About the Israeli International Industrial R&D Cooperation programs:  
<http://www.matimop.org.il/programs.html>
- 49 Wadhwa, Vivek, et al, *America's New Immigrant Entrepreneurs: Then and Now*, Ewing Marion Kauffman Foundation, October 2012, [http://www.kauffman.org/~media/kauffman\\_org/archive/researchreport/2012/10/then\\_and\\_now\\_americas\\_new\\_immigrant\\_entrepreneurs.pdf](http://www.kauffman.org/~media/kauffman_org/archive/researchreport/2012/10/then_and_now_americas_new_immigrant_entrepreneurs.pdf)  
  
For additional data from the Kauffman study about the frequency of Israeli-founded companies by state, see: Orpaz, Inbal, *From Silicon Valley to Beantown, Israeli High-Tech Moves East*, Ha-Aretz, December 12, 2012, <http://www.haaretz.com/business/from-silicon-valley-to-beantown-israeli-high-tech-moves-east.premium-1.484284>
- 50 In an informal estimate, Oded Hermoni of the Israeli Entrepreneur Founders Forum approximated that there are 200 "Israeli companies" operating in Silicon Valley, which employ 1,500 people. See Schubert, Omer, *Putting Israel on the Silicon Valley Map*, "Ha-Aretz", September 4, 2013.
- 51 *ibid* Wadhwa, Vivek
- 52 Both DreamIt and UpWest take an equity stake of up to 8% in companies that join the accelerator, a significant disadvantage compared to MassChallenge Israel.
- 53 See <http://www.scra.org/press/neuroquest-051313.html>  
and <http://sc-israel.org/s-carolina-lures-israeli-innovations-with-new-rd-partnership-neurotech-startup-investment/>
- 54 Israel Dealmakers Summit: <http://www.eiseverywhere.com/ehome/52519/91885/?&>  
  
The Israel Conference: <http://www.theisraelconference.org/>  
  
Teicholz, Tom, *Showing Off at the Israel Conference*, "Huffington Post", June 24, 2013, [http://www.huffingtonpost.com/tom-teicholz/showing-off-at-he-israel-\\_b\\_3476041.html](http://www.huffingtonpost.com/tom-teicholz/showing-off-at-he-israel-_b_3476041.html)  
  
July 30, 2013 announcement from Mayor Rahm Emanuel's office regarding the "Israel-Chicago Water Technology & Innovation Forum": [http://www.cityofchicago.org/city/en/depts/mayor/press\\_room/press\\_releases/2013/july\\_2013/mayor\\_emanuel\\_joinswatermanagementleadersatthefirstisrael-chicag.html](http://www.cityofchicago.org/city/en/depts/mayor/press_room/press_releases/2013/july_2013/mayor_emanuel_joinswatermanagementleadersatthefirstisrael-chicag.html)
- 55 Per the school's website, "Babson has been ranked No. 1 in entrepreneurship education by U.S. News & World Report for the past 20 years." Source: <http://www.babson.edu/about-babson/at-a-glance/Pages/rankings.aspx>  
  
Tally of Babson's Education Abroad programs based on a search of the college's website in November 2013, at <http://educationabroad.babson.edu/index.cfm?FuseAction=Programs.AdvancedSearch>
- 56 For more details about the 2012 "Israel Conference at Harvard," see <http://israelconference2012.org/>.
- 57 WPI's Global Perspective Program, and the reference to 50% of science and engineering students who have studied abroad: <http://www.wpi.edu/academics/igsd/gpp.html>  
  
WPI's 35 global project centers: <http://www.wpi.edu/academics/igsd/project-centers.html>
- 58 Northeastern's MBA International Field Study requirement:  
<http://damore-mckim.northeastern.edu/grad/fulltime-mba/curriculum/>  
  
Israel MBA programs mentioned:  
IDC: [http://portal.idc.ac.il/en/schools/business/progs/grad/pages/gmba\\_gallery.aspx](http://portal.idc.ac.il/en/schools/business/progs/grad/pages/gmba_gallery.aspx)  
Technion: <http://www.technionmba.com/>  
Tel Aviv University: <http://recanati-bs.tau.ac.il/Eng/>  
  
About Israel & CO: [www.israelandco.org](http://www.israelandco.org).
- 59 About the Harvard Kennedy School trek:  
<http://hkscitizen.wordpress.com/2012/12/09/student-led-treks-create-a-buzz/>  
  
About the Wharton Israel Trek: <http://whartonisraeltrek.wordpress.com/>
- 60 Per the Taub Center for Social Research, 29 Israeli scholars work at American academic institutions for every 100 who remain in Israel. Source: David Shamah, *Those Nobels Could Have Been Israel's*, Says Hebrew U President,
-

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in "The Times of Israel," October 10, 2013, [www.timesofisrael.com.those-nobels-could-be-israels-says-hebrew-u-president](http://www.timesofisrael.com.those-nobels-could-be-israels-says-hebrew-u-president).

- 61 Technion's "Technological Entrepreneurship" class, taught by Nobel Prize winner Dan Schechtman and business school professor / innovation expert Shlomo Maital, is the most heavily enrolled class at the institute.

Technion alumni generated \$21 billion and 78,000 jobs in Israel's high-tech annual revenue in 2011, or some 20% of the annual output of Israel's most important sector.

See <http://www.timesofisrael.com/nobel-winner-has-tips-on-how-to-succeed-as-a-start-up/>  
and [http://www.nytimes.com/2013/04/14/education/edlife/inside-the-technion-israels-premier-technological-institute-and-cornells-global-partner.html?\\_r=0](http://www.nytimes.com/2013/04/14/education/edlife/inside-the-technion-israels-premier-technological-institute-and-cornells-global-partner.html?_r=0)  
and <http://pard.technion.ac.il/technion-nation-statistics-the-creative-power-of-technion-graduates/>  
and Frenkel, Amnon, and Shlomo Maital, *Technion Nation: Technion's Contribution to Israel and the World*, Samuel Neaman Institute for Advanced Studies in Science and Technology, 2012.

Tel Aviv University alumni are CEOs of more start-ups worldwide than other Israeli institution.  
See *ibid*, Woolf, Max, *Which Universities Produce the Most Start-Up Founders?*

- 62 Orpaz, Inbal, "Chief Scientist warns budget cuts are endangering Israeli high tech", Ha-Aretz, December 20 2012. See <http://www.haaretz.com/business/chief-scientist-warns-budget-cuts-are-endangering-israeli-high-tech-premium-1.485966>

- 63 Fernandes, Deirdre, *Finance Remains Top Sector in Mass.*, Boston Globe, November 29, 2013, <http://www.bostonglobe.com/business/2013/11/29/financial-services-companies-still-strong-massachusetts/DRPRYCA0lUKoVfVCLhfOwJ/story.html>

About the Citi Israel Technology Innovation Lab:  
<http://www.citigroup.com/citi/about/countrypresence/israel.html>  
and  
<http://www.globes.co.il/serveen/globes/docview.asp?did=1000833520&fid=1725>

About Bank Leumi and The Elevator's FinTech Innovation Hub:  
<http://www.globes.co.il/serveen/globes/docview.asp?did=1000869329>  
and  
<http://www.elevatorfund.com/fintech/>

- 64 Quotation of Reed Sturdevant, Investor, TechStars Boston, in *Startup Ecosystem Report 2012: Part One*, page 42, Startup Genome, <http://www.slideshare.net/ceobroadband/startup-ecosystem-report-2012>

- 65 Over 61,000 passengers flew roundtrip between Boston and Tel Aviv in 2012. In addition, 33% choose a premium class of service (business- or first-class), which is where the profits are made.

Source: Massport presentations to the Massport-Israel Task Force, an ad-hoc group formed by the agency to engage communal support regarding the non-stop flight opportunity. The premium fare figure is for the latest available data as of 2Q2011.

- 66 Roberts, *Entrepreneurial Impact: The Role of MIT*.

- 67 Easley, Charles E., and William F. Miller, *Impact: Stanford University's Economic Impact via Innovation and Entrepreneurship*, 2011, [http://engineering.stanford.edu/sites/default/files/Stanford\\_Alumni\\_Innovation\\_Survey\\_Report\\_102412\\_1.pdf](http://engineering.stanford.edu/sites/default/files/Stanford_Alumni_Innovation_Survey_Report_102412_1.pdf).

- 68 This individual must be identified in company materials as having been one of the founders. The definition of a qualifying Israeli founder is: an Israeli citizen and resident; or an Israeli who moved from Israel as an adult. Entrepreneurs born in Israel, but who left Israel in childhood and did not return there (i.e. Israeli-born, but who lived elsewhere through adulthood) were not included, as their Israeli experience was not material in their development towards entrepreneurship.

- 69 The acquired company's technology must continue as core and be clearly identifiable in the acquiring company's product portfolio.

- 70 The Israeli intellectual property must continue as core and be clearly identifiable in the Massachusetts company's product portfolio.







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