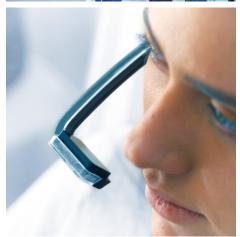






ACCESSING THE U.S. MARKET WITH ISRAELI ASSISTIVE TECHNOLOGY







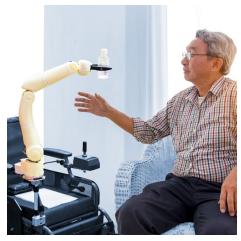








TABLE OF CONTENTS

Executive Summary	3
Global Market Potential	4
U.S. Market Potential	4
Israeli Assistive Technology Opportunities	5
U.S. Market Considerations	
Payment Coverage	
Technology First States	8
U.S. Military Veterans	9
Mandated vs. Elective Solutions	9
Crossover Appeal	9
U.S. Distribution Channels	10
Governmental and Nonprofit Entities	10
Distributors	10
Rehabilitation Centers and Hospitals	
Universities	10
Online Retailers	
Key User Communities	
Corporates	
Conferences	
Additional Channels	
Conclusions	12
Appendices	13
Appendix 1: Practical Advice for Companies Planning to Enter the U.S. Market	
Appendix 2: Governmental and Nonprofit Entities	
Appendix 3: Distrubutors	
Appendix 4: Rehabilitation Centers and Hospitals	
Appendix 5: Universities	
Annendix 6: Online Retailers	

EXECUTIVE SUMMARY

The United States Assistive Technology Act of 1988 was passed to increase the access to, availability of and funding for assistive technology through state efforts and national initiatives. The act defines assistive technology as "any product, device or equipment, whether acquired commercially, modified or customized, that is used to maintain, increase or improve the functional capabilities of individuals with a disability." Assistive technology is relevant to more than 1 billion people globally, including over 25% of the U.S. population, and represents an emerging \$31 billion market opportunity.

The assistive technology sector dynamics indicate that it is poised for growth. The global user base is growing, driven by the world's aging population, and advanced technology is increasingly enabling scalable, cost-effective solutions. Whereas assistive solutions have traditionally consisted of hardware solutions, such as wheelchairs and walking aids, software and apps now present opportunities to develop, customize and distribute solutions at scale in a cost-effective manner. To the extent that hardware is needed, the prevalence of 3D printing has made hardware faster and cheaper than ever to prototype and test. Advances in computer vision, machine learning and virtual and augmented reality have simplified the prototyping process, enabling more relevant assistive technology solutions.

In addition, much of the developed world's population is digitally literate, making technology-based assistive solutions increasingly relevant. Finally, multinational corporations, often through their corporate social responsibility (CSR) departments, are talking more about accessibility and disabilities with regard both to employing people with disabilities and to making their products or services more accessible to more people.

Israel is equipped to become a significant global supplier of assistive technology. The country has proven prowess in innovation, top-tier hospitals and rehabilitation centers that are themselves embracing technology, maker communities that are partially or fully focused on assistive technology development and emerging governmental support for the growth of an assistive technology ecosystem. Moreover, the "Start-Up Nation" brand is strong; in meetings with a range of people within the U.S. assistive technology community who represent government agencies, academia, rehabilitation centers, distributors and consultants, there is a consistent interest in working with Israel.

There is room for redefining current assistive technology categories. On a micro level, assistive technology contains numerous subsectors that overlap yet differ greatly from each other in the key area of distribution. For instance, while solutions for visual impairment and mobility are both assistive technologies, the key influencers and distribution channels for these products are likely to be different.

On a macro level, the current category of assistive technology may be too small to justify focused attention and would benefit from expansion, most likely under an umbrella that would also include senior/elder-care solutions (sometimes referred to as "SilverTech"). Members of the assistive technology community in the U.S. note that people with disabilities represent a niche segment, but identify the growing elderly population as an attractive business segment. In the Israeli assistive technology ecosystem there are about 100 companies in the assistive/ accessibility/disabilities space, but this number rises to approximately 230 companies when the category is expanded to include solutions focused on rehabilitation and seniors (see Landscape on page 6).

Israeli assistive technology developers should consider relevant resources and opportunities with regard to U.S. market penetration. Free online listings and retailers should be leveraged by all Israeli assistive technology companies. Given the complexity of U.S. government reimbursement programs and insurance coverage, Israeli manufacturers should consider the ways in which they can minimize their reliance on reimbursements. Within the U.S., some states are emerging as more progressive than others with regard to assistive technology and should be given higher-priority consideration when it comes to U.S. market penetration.

Although the 152 medical centers of the U.S. Department of Veterans Affairs (VA) operate with a degree of independence and can be tough to penetrate systematically, the ability to present an assistive technology solution as relevant for military veterans opens a potentially large distribution channel. While not straying from their intended mission, Israeli assistive technology companies should seek out crossover opportunities for their solutions beyond the traditional audience of people with disabilities and the elderly.

There are challenges to the Israeli assistive technology sector's ability to scale. First, investment in the sector has been small relative to other technology sectors. Second, the global go-to-market strategy for assistive technology companies is fragmented, immature and unclear. Addressing the second challenge — clarifying and streamlining the go-to-market strategy and demonstrating that Israeli assistive technology can indeed show scale overseas — may ameliorate the first challenge of limited funding.

This report highlights the key considerations, channels and players that influence the awareness and distribution of assistive technologies in the U.S. market.

That's the hard thing about hard things – there is no formula for dealing with them. Nonetheless, there are many bits of advice and experience that can help with the hard things.

Ben Horowitz, "The Hard Thing About Hard Things:
 Building a Business When There Are No Easy Answers"

GLOBAL MARKET POTENTIAL

The global assistive technology market holds significant opportunities:

According to the World Health Organization, more than 1 billion people worldwide are in need of one or more assistive products:



70 million people require a wheelchair



285 million people are visually impaired



360 million people have moderate to profound hearing loss

More than 2 billion people will need at least one assistive product by 2030.

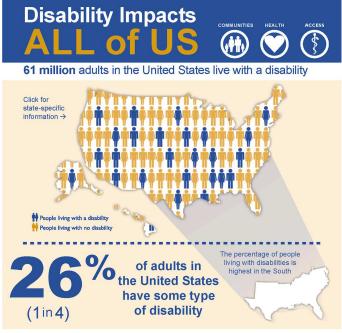
The United Nations has identified persons with disabilities as the largest minority group in the world. According to global market intelligence and consulting organization Coherent Market Insights, the global market for assistive devices for elderly and disabled persons, valued at \$14 billion in 2015, is expected to surpass \$31 billion by 2027.

U.S. MARKET POTENTIAL

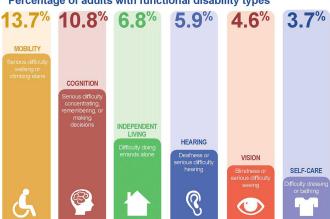
Assistive technology is relevant to over 25% of the U.S. population:

Figure 1: U.S. Disabilities

Disabilities affect people of all ages:

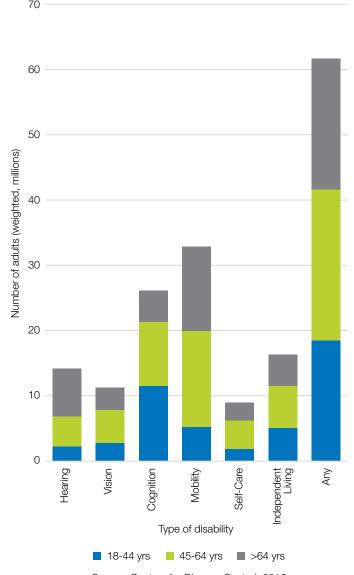






Source: Centers for Disease Control, 2016

Figure 2: U.S. Disabilities by Age Group



Source: Centers for Disease Control, 2016

ISRAELI ASSISTIVE TECHNOLOGY OPPORTUNITIES

Many factors suggest that the emerging assistive technology sector in Israel is poised to become a large sector with global growth potential.

First, the Start-Up Nation has solidified a global reputation second only to Silicon Valley for spawning technology businesses. In some sectors, such as cybersecurity and financial technology, Israel is a world leader. It is now applying the same Start-Up Nation innovation mentality to the world of accessibility, with more than 100 companies producing assistive technology products.

Second, with numerous top-tier care facilities for persons with disabilities and the elderly, Israel provides assistive technology companies with a path to partnering with these rehabilitation facilities to prototype, test and improve their products. In fact, several Israeli rehabilitation facilities now house incubation and innovation centers within their campuses. Examples include ALYNnovation at ALYN Pediatric and Adolescent Rehabilitation Hospital in Jerusalem and the ARC Innovation Center at Sheba Medical Center at Tel HaShomer.

Third, with its culture of tikkun olam ("repairing the world"), Israel is home to several maker communities spurring creativity and the development of assistive technology solutions with the potential to be scaled into global businesses. Tikkun Olam Makers (TOM) runs global makeathons to create and disseminate affordable solutions that address the often neglected challenges of people with disabilities, the elderly and the poor. Carmel 6000 handpicks highly qualified and motivated young Israelis to spend their two years of national service developing innovative applications and solutions that benefit disadvantaged populations.

Fourth, there is growing Israeli governmental support specifically for the assistive technology sector. One example is the recently created Assistive Technology for the Disabled Incentive Program, a collaboration between the Israel Innovation Authority and the National Insurance Funds to offer grants of up to 900,000 NIS (approximately \$250,000) for the research and development of technologies that serve groups with physical, mental or cognitive disabilities.

Figure 3: Snapshot of the Israeli Assistive Technology Landscape



Innovators







Incubators/Accelerators









Funders











Government Entities

רשות החדשנות ^ L → Israel Innovation ✓ J ¬ Authority







Nonprofits







While the specific categories of products within assistive technology may vary, there are five generally accepted subsectors:





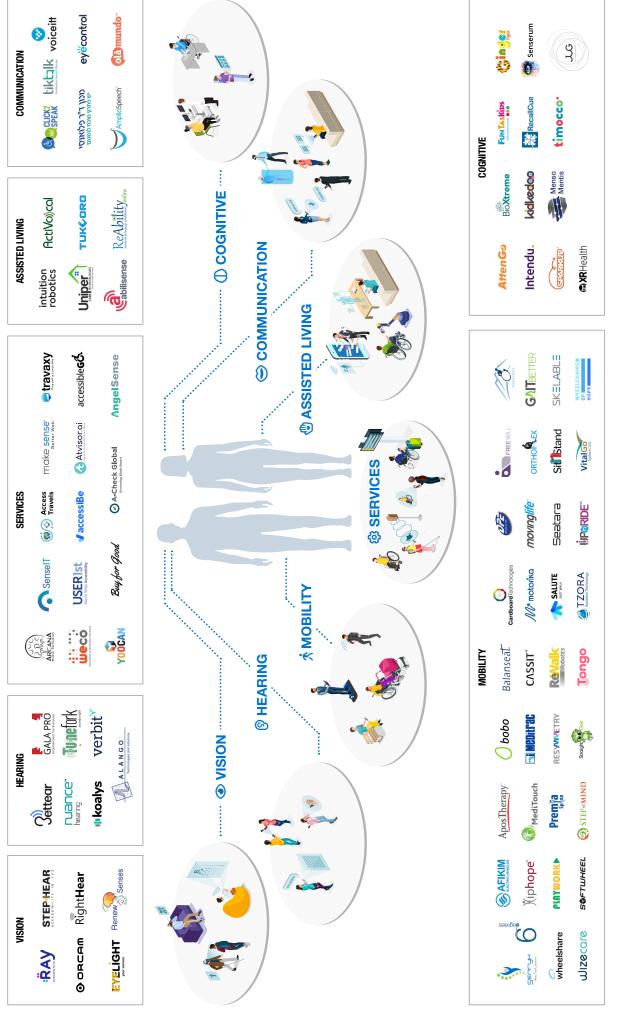






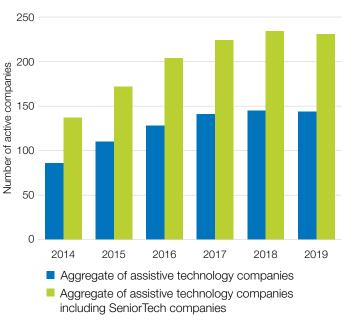
The current assistive technology landscape in Israel comprises these five subsectors as well as a sixth category for services such as accessible web and accessible travel, and a seventh category centered on assisted living.

FIGURE 4: LANDSCAPE OF ISRAELI ASSISTIVE TECHNOLOGY COMPANIES, JANUARY 2020



It is worth noting that there are approximately 105 assistive technology companies in Israel today, based on the most restrictive definition of "assistive technology." However, logically expanding the category to include "rehabilitation" increases the number of companies to 144, and a further expansion to include "seniors" (which makes sense given similar solutions) yields 231 companies.¹

Figure 5: Assistive Technology Companies by Year, Including SeniorTech Companies





1 Source: Start-Up Nation Finder database

U.S. MARKET CONSIDERATIONS

The United States represents a large market in which over one quarter of citizens across all age groups experience some type of disability. This offers a significant commercial opportunity for assistive technology, including products developed in Israel. It is a complex market to enter, however, due to both regulatory and policy differences across states and the broad array of gatekeepers who stand between manufacturers and end users. This section will illustrate key considerations for Israeli assistive technology developers entering the U.S. market, followed by an overview of U.S. distribution channels.

Payment Coverage²

Though some payment assistance exists for assistive technologies, this is an area that is notoriously bureaucratic in the United States. Medicare, the federal health insurance program for persons aged 65 and older, will cover a percentage of the cost of assistive technology products if the item meets the definitions for "medical necessity" and "durable medical equipment." However, the term "medical necessity" is subject to interpretation, and the requirements for "durable medical equipment" become more difficult to meet as assistive technology solutions are increasingly based on software or other advanced technologies. Medicaid, a federal and state program that helps with medical costs for some people with limited income and resources, may partially cover the cost of some assistive technologies, but coverage varies widely by state.

Health insurance policies usually do not mention funding for assistive technology devices and services, but they will fund specific equipment, such as wheelchairs or scooters, when medically necessary. Private insurance companies require documentation and/or prescriptions in order to cover the cost of equipment, and they commonly challenge or deny claims when the equipment costs more than what is termed "standard and customary."

The CEO of a 30-year-old assistive technology company mentioned that in the past 10 years his company has stopped working directly with government payment programs and insurance companies. His company still helps users complete paperwork for reimbursements, but only after receiving payment for the product from the user. This CEO stated that he has watched several of his former competitors go bankrupt while continuing to rely on direct payments from the government or insurance companies.

This is not to say that assistive technology manufacturers entering the U.S. market should ignore government and insurance company reimbursement potential, but these manufacturers should allocate significant time to understanding the reimbursement models and ideally build business models that do not rely fully on such reimbursement. In addition, there are reimbursement consultants, such as Mediclever Reimbursement Consultants, Boston MedTech Advisors and Larchmont Strategic Advisors, which can guide Israeli companies through the U.S. reimbursement process. Both Mediclever and Boston MedTech maintain a presence in Israel.

The U.S. reimbursement landscape is incredibly complex. Plus, technology moves faster than the regulators. Given these dynamics, it is nearly impossible for any company, let alone a company from outside the U.S., to break into the U.S. market with a healthcare-related product without working with U.S.-based reimbursement experts.

- Principal at a U.S. healthcare advisory firm

Technology First States³

The Technology First movement has been slowly growing since May 2018, when Ohio Governor John Kasich signed the Technology First Executive Order, making Ohio the first state in the country to place an emphasis on expanding access to technology for persons with developmental disabilities. Though focused on intellectual and developmental disabilities (I/DD), the Technology First movement is expanding and may have broader applications for physical disabilities.

Currently, 16 states have declared themselves Technology First states aiming to expand access to technology for people with developmental disabilities, with the goal of supporting their ability to live as independently as possible. Technology First initiatives commonly refer to assistive in-home technologies, remote monitoring, mobile tracking applications and other technology-related solutions designed to improve individuals' quality of life.

Ohio, through the Technology First initiative, is committed to the goal that citizens with developmental disabilities be afforded the opportunity to improve their lives through supportive technology.

 Ohio executive order establishing the Technology First Initiative

The use of assistive technology will be considered first in the discussion of support options available to individuals.

- Principal at a U.S. healthcare advisory firm

While it remains to be seen what "Technology First" (whose definition differs from state to state) will tangibly mean for technology providers, it is encouraging that states are making a statement that technology solutions are a key part of the equation when it comes to improving the lives of their residents with disabilities. States with official Technology First initiatives include Alaska, Colorado, Connecticut, Delaware, Hawaii, Indiana, Minnesota, Missouri, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Tennessee and Washington, as well as the District of Columbia.

² Primary sources: http://www.infinitec.org/insurance-medicare-and-medicaid-funding-for-assistive-technology and https://www.nextavenue.org/paying-assistive-technology

³ Sources: "State of the States in the Use of Technology" by Shea Tanis, Ph.D., June 5, 2019, https://www.simply-home.com/blog-overview/technology-first-a-growing-movement-part-1, https://www.openminds.com/market-intelligence/executive-briefings/are-you-in-a-technology-first-state-does-it-matter

U.S. Military Veterans

One important factor to consider with regard to assistive technology products entering the United States is whether a product is clearly relevant for military veterans and can garner support from the U.S. Department of Veterans Affairs (VA). The VA, which is charged with overseeing the well-being of U.S. military veterans, runs a nationwide network of 152 medical centers. According to the Veterans Affairs Assistive Technology website, the VA's assistive technology mission is "to enhance the ability of Veterans and active duty service members with disabilities to fulfill life goals through the coordination and provision of appropriate assistive technology services." Further, its vision is "to be a leader in assistive technology, providing state-of-the-art services by certified AT providers whose collaborative efforts maximally improve the quality of life of Veterans and active duty service members with disabilities."

While some assistive technology companies have had success with the VA as a procurement and distribution partner, it can be difficult to work with the VA in a centralized manner. Each of the 152 VA medical centers seems to operate with a level of independence, which necessitates that an assistive technology company establish contacts within specific VA medical centers.

If you've been to one VA, then you've been to one VA. The VA is incredibly challenging to work across the entire system.

- U.S.-based industry insider

Mandated vs. Elective Solutions

Regulated industries present different opportunities than non-regulated industries. U.S. government websites are subject to Web Content Accessibility Guidelines (WCAG) which state that in order to be in compliance with the Americans with Disabilities Act (ADA), content must embody the principles that make up the acronym POUR: Perceivable, Operable, Understandable and Robust. Increasingly, corporate and retail websites are seeking to be ADA-compliant even if they are not mandated to do so by law. Companies that help ensure compliance with WCAG should be well-positioned to grow in this regulated industry. Notable Israeli companies in this category include User 1st, EqualWeb and SenselT.

Similarly, the real estate sector is subject to accessibility guidelines, many of which differ by local municipality. Companies that can help real estate developers and operators comply with local accessibility regulations may experience less friction with elective solutions in their go-to-market execution. One Israeli solution in this space is the A-Check app from Tamar Accessibility. Likewise, Israeli companies such as Right-Hear and Step-Hear, which offer navigation systems for the blind, may benefit from municipalities and real estate operators offering a level of accessibility that exceeds minimally regulated levels.

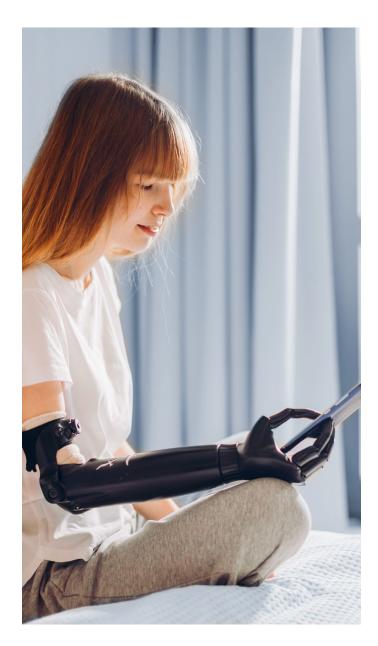
In general, companies in the services sector of Figure 4 may require less deep technology and therefore be subject to less regulation (or none) compared to other sectors, enabling a simpler go-to-market process than that of disability-specific solutions.

Crossover Appeal

While assistive technology companies tend to be missiondriven and often focus on addressing an issue that has personal relevance to the founders, in the interest of reaching scale it behooves companies to seek out additional, non-assistive uses for their core technology.

Emerging Israeli crossover examples include Voiceltt, which applies its AI communication technology to general voicedriven digital assistants; Verbit, whose AI-powered transcription technology, in addition to significantly improving the lives of hearing-impaired students, is also finding broad market appeal in the legal, media and enterprise markets as well as in additional industries that benefit from accurate transcription services; Tunefork, which has adapted its audio technology to broad music applications and smart devices; ReSymmetry, which has applied its comfort system for prolonged motionless sitting from wheelchairs to the larger office chair market; and SoftWheel, which has adapted its shock-absorbing wheelchair wheels to the bicycle and automotive industries.

By creating a scenario in which the majority of their revenue is derived from non-assistive applications and then used to fund their core assistive mission, assistive technology providers can better serve both their end users and their companies.



U.S. DISTRIBUTION CHANNELS

While most technology sectors have multiple channels that affect how products get into the hands of end users, the assistive technology sector is particularly fragmented. Some of the channels between an assistive technology provider and the end user include government entities, hospitals and rehabilitation centers, insurance companies, physical and occupational therapists, doctors and distributors. This section outlines the various relevant channels and the key gatekeepers within each channel in the United States.

Governmental and Nonprofit Entities⁴

The Technology-Related Assistance for Individuals with Disabilities Act, often referred to as the "Tech Act," was first passed in 1988 and has been reauthorized numerous times. The United States Congress passed this legislation in order to increase the access to, availability of and funding for assistive technology through state efforts and national initiatives.

The Association of Assistive Technology Act Programs (ATAP) is a national member-based nonprofit organization comprising state Assistive Technology Act Programs funded under the Assistive Technology Act (AT Act). ATAP facilitates the coordination of all 56 U.S. Assistive Technology Act Programs, which represent each U.S. state, the District of Columbia, Puerto Rico, Guam, the U.S. Virgin Islands, American Samoa and the Commonwealth of the Northern Mariana Islands.⁵

ATAP "supports state efforts to improve the provision of assistive technology to individuals with disabilities of all ages through comprehensive statewide programs of technology-related assistance." While specific state and territorial assistive technology programs do not purchase technology for individual state residents, these programs can be helpful resources to raise awareness of available technologies through activities such as demo libraries and short-term product loans that enable residents to test a given product.

Many additional governmental and nonprofit entities populate the world of assistive technology. While it can be challenging to understand the sometimes subtle differences between these entities, each can be an important advocate for individual Israeli assistive technology companies and the Israeli assistive technology ecosystem overall. In the interest of maintaining a manageable list, disability-specific entities such as the Foundation Fighting Blindness are not included in the list provided in Appendix 2.

Distributors⁶

Distributors represent perhaps the most significant sales channel for assistive technology products. Some distributors are broadly spread across a range of disabilities, but most focus on one particular category of products. Because assistive technology products tend to require some level of end-user training, distributors serve on a regional basis so that they can maintain close contact with the facilities and/or end users to whom they sell. As such, connecting directly with a large number of distributors is likely to be required. See Appendix 3 for a select list of major distributors.

Rehabilitation Centers and Hospitals

Similar to rehabilitation centers in Israel, U.S. rehabilitation centers are increasingly embracing technology. Shepherd Center in Atlanta, for example, is exploring the establishment of an internal innovation hub. The Center has already formed a New Technology Committee to review new technologies, some of which the Center proactively seeks out and others which find their way to it. Once a technology is approved by the Committee, it moves to an internal capital approval team to ensure funding for the technology.

Rehabilitation centers are also open to collaborations around testing and refinement. When applicable, it is important for Israeli assistive technology entrepreneurs to connect with the new technology resources within rehabilitation centers. See Appendix 4 for a select list of rehabilitation centers and hospitals.

Universities⁷

Select universities maintain departments focused on assistive technology, either as a department within the university or as an independent entity housed within the university. These universities are frequently a destination for other entities seeking technology solutions for a given challenge. For instance, representatives from the Georgia Council on Developmental Disabilities frequently consult with the team at Tools for Life, Georgia's Assistive Technology Act Program located at Georgia Tech University in Atlanta. While universities may be able to help with creating awareness and the distribution of products, they are also a resource for development partnerships, proof of concept testing and more.

Of particular note in the university space is the University of Maryland's Trace Research and Development Center, which is "a leader in the development and large-scale pilot implementation of the Global Public Inclusive Infrastructure (GPII), to simplify access to information and communication technology by people with disability, literacy, digital literacy and aging-related barriers." The following are among the projects being led by the team at Trace:

- GPII Unified Listing: a database of Augmentative and Alternative Communication (AAC) products, including anything designed to help users access computers or phones, and mainstream digital products with built-in access features.
- GPII Developer Space: a one-stop shop to find resources, components and people to conceive, develop, test and market novel accessible solutions.

⁴ Information pulled from meetings with representatives from the Administration for Community Living, the Association for Assistive Technology Act Programs, G3ict, the National Association of Councils on Developmental Disabilities, the National Council on Independent Living, Raising the Floor, RespectAbility and the National Institute on Disability, Independent Living and Rehabilitation Research, as well as state disability representatives from Arkansas, Georgia and Montana and industry heads Sue Swenson and Judith Heumann.

⁵ See http://www.resnaprojects.org/allcontacts/statewidecontacts.html for a list of each of the 56 specific state and territory programs.

⁶ Particular credit to Robert Felgar, CEO of RAZ Mobility, and to representatives from OrCam for information on working with distributors.

⁷ Sources: Conversations with representatives from Tools for Life at Georgia Tech, the University of Maryland's TRACE Center and the University of Pittsburgh.



Every entrepreneur working in the assistive/accessibility space should take advantage of these free resources and contribute to them as appropriate.

See Appendix 5 for a list of university programs related to assistive technology.

Online Retailers

Based on discussions with assistive technology manufacturers, online retailers currently appear to be a small distribution channel but may have growth potential, especially for products that require a lower level of training and user customization. As it has with other industries, Amazon may emerge as a key channel. See Appendix 6 for a list of retailers who market assistive technology products online.

Key User Communities

Some categories of disability have independent bodies dedicated to testing solutions in that particular area. A product endorsement from one or more these independent bodies could provide products with a valuable seal of approval. A few examples include the Smith Kettlewell Eye Research Institute, which focuses on the aid and rehabilitation of the blind and partially sighted, and Disability Cocoon, which provides content designed to enable people in need to discover, learn about and implement relevant assistive technologies.

Corporates

While corporates would seem to offer two potential assistive technology partnership opportunities — assistive technology to help them employ persons with disabilities and/or assistive technology to enable them to expand their product or service to more people — few have actually yet emerged as significant distribution channels. However, some big tech companies, notably Microsoft and Google, have invested financial and human resources in accessible technologies.

Non-tech corporates with a stated interest in the accessible/ assistive space, usually via their corporate social responsibility (CSR) departments, include Starbucks, McDonald's, FedEx, Unilever and Citibank. The Valuable 500, a global entity based in Ireland, is making impressive progress on its mission to sign up 500 multinational corporations to take a pledge to elevate disability issues to a high-priority agenda item. Disability:IN, a Virginia-based nonprofit resource for business disability inclusion worldwide, works with corporations to address disability issues in the workplace. It is definitely worth keeping an eye on the corporate space for emerging partnership opportunities.

Conferences

A range of industry conferences presents opportunities both for networking and for demo-ing products to industry professionals.

Conference	General Timing	Usual Location
American Association on Intellectual and Developmental Disabilities (AAIDD)	June	Pittsburgh, Pennsylvania
American Network of Community Options and Resources (ANCOR)	April	Miami, Florida
Assistive Technology Industry Association (ATIA)	January/ February	Orlando, Florida
California State University Northridge (CSUN)	March	Anaheim, California
Disability:IN	July	Orlando, Florida
M-Enabling Summit	June	Washington, D.C.

Additional Channels

Some additional approaches that assistive technology companies can use to grow their sales include the following:

- Sampling Just as with classic consumer product sampling (such as the food and beverage samples offered for free at Costco), some companies send samples of their products to industry professionals, usually therapists or doctors, to be tested on real users before the professionals commit to recommending or selling the products.
- Foundation funding One established manufacturer
 of walkers and walking aids has worked closely with the
 Parkinson's Foundation to persuade it to fund the cost of
 walkers and walking aids for patients with Parkinson's disease.
 Similar opportunities should exist for other products and
 other foundations.
- Practice-to-practice selling Similar to the way in which
 pharmaceutical salespeople market directly to physicians'
 practices, some assistive technology manufacturers have had
 success, albeit slowly and methodically, with marketing directly
 to therapists and other medical practices.
- 4. Traditional retail Though it is early in the process, traditional retailers should eventually develop into viable assistive technology distribution channels, especially for products with competitive consumer price points. In particular, U.S. mega retailers Best Buy and CVS have recently announced strategic pushes into consumer healthcare. Israeli digital health players TytoCare and Dario Health have both reached agreements recently to sell their offerings at Best Buy, indicating the company's openness to selling Israeli healthcare solutions.

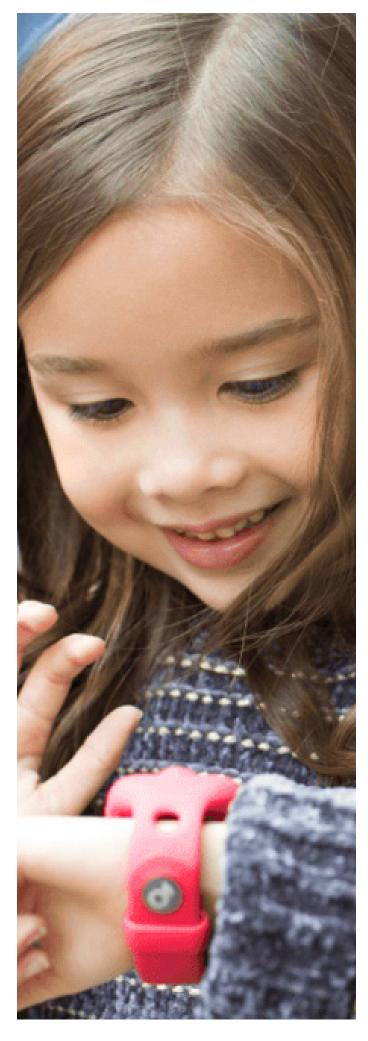
CONCLUSIONS

In General:

- Israel's Start-Up Nation brand is strong. Conversations with a range of entities in the United States have shown a high awareness of Israeli innovation and a desire to work with it.
- 2. In the large and growing global market, assistive technology is perceived as a niche sector. There are opportunities to expand the market through into adjacent sectors, especially through the inclusion of AgeTech/SilverTech (technology for the world's aging population). Whether one is born with a disability, comes into it via disease or ages into it, at some point everyone is likely to experience a degree of disability that impairs their level of independence.
- Some markets that are smaller than the U.S. market but more progressive with regard to assistive technology policies include Australia, the UK, Germany and Japan.
- 4. Given the interest in the Start-Up Nation brand and the fragmentation and complexity of market entry channels, there is an opportunity for a centralized entity to act on behalf of the Israeli assistive technology ecosystem in order to efficiently connect the ecosystem to a growing global demand.

For the Israeli Assistive Technology Entrepreneur:

- Assistive technology is a broadly defined category. Within assistive technology, each subsector should be viewed as its own sector with its own unique distribution channels and partners. For example, while the technologies for visual impairments and cognitive disabilities are both assistive technologies, the products will have some unique distribution channels and discrete value-added partners.
- Assistive technology entrepreneurs looking to scale their companies should consider ways to take their core technology and apply it to broader market use without abandoning their intended assistive use. The crossover opportunity may significantly expand sales potential and create a more attractive case for prospective investors.
- The U.S. market has a significant need for assistive technology, but it must be penetrated via multiple entry channels; there is no "silver bullet" solution.
- 4. United States governmental and insurance reimbursement processes remain complex and bureaucratic. Manufacturers should try to minimize their reliance on reimbursement or consider hiring a consultant to help navigate these processes.
- Justifying a case to work directly with the Veterans Administration medical centers may accelerate a product's growth.
- Offering a solution to industries subject to legal compliance in relation to disabled individuals may simplify the go-to-market path. (These tend to be B2B sales rather than B2C or B2B2C).
- 7. There are a few free resources, such as the GPII Unified Listing, the GPII Developer Space, the AbleData database and Israel's own Atvisor marketplace, that every Israeli assistive technology company should immediately leverage.
- 8. While traditional retail remains a small channel, this channel may grow, especially through viable consumer price points. Both Best Buy and CVS have recently announced significant initiatives around shelf-ready health products. Entrepreneurs should be tracking this emerging opportunity.



APPENDICES

Appendix 1: Practical Advice for Companies Planning to Enter the U.S. Market	13
Appendix 2: Governmental and Nonprofit Entities	13
Appendix 3: Distrubutors	15
Appendix 4: Rehabilitation Centers and Hospitals	16
Appendix 5: Universities	18
Appendix 6: Online Retailers	19

Appendix 1: Practical Advice for Companies Planning to Enter the U.S. Market

The U.S. market has a significant need for assistive technology, but it must be penetrated via multiple entry channels; there is no "silver bullet" solution. Israeli entrepreneurs with consumeroriented assistive technology products should consider the following actions:

- 1. Find a price point that enables retail distribution and minimizes the need for reimbursement.
- 2. Engage a reimbursement consultant if necessary, starting with a smaller, lower-priced entity.
- Seek out relevant foundations or philanthropies that may partially fund your product if needed.
- Build relationships with relevant local Association of Assisted Technology Act Programs (ATAP) representatives, beginning with Technology First states.

- Engage key distributors focused on your specific product sector.
- Present at major conferences, including both general assistive technology conferences and conferences specific to your product sector.
- Build relationships (using only a soft-sell approach) with key contacts at relevant government entities, nonprofits, rehabilitation centers, universities, key user communities and so forth.
- 8. Utilize all free listings and resources, such as the GPII Unified Listing, the GPII Developer Space, the AbleData database and Israel's own Atvisor marketplace.

Appendix 2: Governmental and Nonprofit Entities

Entity	Description and URL	HQ	Comment
Administration for Community Living (under HHS)	The Administration for Community Living was created around the fundamental principle that older adults and people of all ages with disabilities should be able to live where they choose, with the people they choose and with the ability to participate fully in their communities. https://acl.gov	Washington, D.C.	A useful source of content in the disabilities space.
Assistive Technology Industry Association (ATIA)	The Assistive Technology Industry Association is a not-for-profit membership organization of manufacturers, sellers and providers of technology-based assistive devices and/or services for people with disabilities. https://www.atia.org/	Chicago, Illinois	Israeli entrepreneurs should pay the \$650 annual membership fees.
Association of Assistive Technology Act Programs (ATAP)	The Association of Assistive Technology Act Programs (ATAP) is a national member-based nonprofit organization of state Assistive Technology Act Programs funded under the Assistive Technology Act. ATAP facilitates the coordination of state assistive technology programs nationally and provides technical assistance and support to its members. https://www.ataporg.org/	Alexandria, Virginia	A good starting point for understanding the differences between states.
Association of University Centers on Disabilities (AUCD)	AUCD's mission is to advance policies and practices that improve the health, education and social and economic well-being of all people with developmental and other disabilities, their families and their communities by supporting its members in research, education, health and service activities that achieve its vision. https://www.aucd.org/template/index.cfm	Silver Spring, Maryland	

Entity	Description and URL	HQ	Comment
Computer/ Electronic Accommodations Program (CAP)	Since 1990, CAP has been at the forefront of providing assistive technology to allow DoD and other federal employees with disabilities, as well as their employers, to access electronic and information technology. https://www.cap.mil/	Alexandria, Virginia	Government- focused program but relevant to companies specializing in computer accessibility.
The Global Initiative for Inclusive ICTs (G3ict)	Promoting the rights of persons with disabilities in the digital age, G3ict's objectives and global outreach are aligned with the dispositions of the Convention on the Rights of Persons with Disabilities (CRPD) on the accessibility of information communication technologies (ICTs) and assistive technologies. https://g3ict.org/	Washington, D.C.	
National Association of Councils on Developmental Disabilities (NACDD)	NACDD is a national nonprofit organization that supports the nation's 56 governor-appointed Developmental Disabilities Councils that work within state government to promote the independence, productivity and integration of people with disabilities through systems change activities. The DD Councils receive federal funding to support programs that promote self-determination, integration and inclusion for all people in the United States with developmental disabilities. https://nacdd.org/	Washington, D.C.	
National Council on Independent Living (NCIL)	NCIL advances independent living and the rights of people with disabilities. https://www.ncil.org/	Washington, D.C.	
National Disability Rights Network (NDRN)	The National Disability Rights Network works on behalf of Protection and Advocacy Systems (P&As) and Client Assistance Programs (CAPs), the nation's largest providers of legal advocacy services for people with disabilities. https://www.ndrn.org/	Washington, D.C.	
National Institute on Disability, Independent Living and Rehabilitation Research (NIDILRR)	The National Institute on Disability, Independent Living and Rehabilitation Research is a United States governmental agency that provides leadership and support for a comprehensive program of research related to the rehabilitation of individuals with disabilities. https://acl.gov/about-acl/about-national-institute-disability-independent-living-and-rehabilitation-research	Washington, D.C.	Research- oriented program with grants available selectively.
Raising the Floor	Raising the Floor is an organization of diverse people from industry, academia, NGOs and other sectors who have come together to ensure that people who face barriers due to disability, literacy, digital-literacy and aging are able to fully understand, access and use the digital world (the web, computers, tablets, phones, educational materials, ticket machines, thermostats and home appliances). Its central focus is the development of a Global Public Inclusive Infrastructure (GPII).	Washington, D.C.	Valuable open-source resource.
Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)	RESNA is the premier professional organization dedicated to promoting the health and well-being of people with disabilities through increasing access to technology solutions. RESNA advances the field by offering certification, continuing education, and professional development; developing assistive technology standards; promoting research and public policy; and sponsoring forums for the exchange of information and ideas to meet the needs of its multidisciplinary constituency. https://www.resna.org/	Arlington, Virginia	Key player in determining accessibility standards.

Entity	Description and URL	HQ	Comment
RespectAbility	RespectAbility fights stigmas and advances opportunities so that people with disabilities can fully participate in all aspects of the community. https://www.respectability.org/	Rockville, Maryland	
The Arc	The Arc is the nation's largest leading organization for people with intellectual and developmental disabilities (I/DD) and their families, with a 60-year history of promoting and protecting the rights of people with I/DD and providing them with the opportunity to live full, satisfying and self-determined lives as valued and contributing members of their communities. https://thearc.org/	Washington, D.C.	

Note: ATIA membership starts at \$650 per year and is open to global members. Israeli AT companies should consider this option.

Appendix 3: Distributors

Entity	Focus Areas	HQ	URL
Adaptive Technology Resources	Vision	Grafton, Wisconsin	https://www.adaptivetr.com/
A. T. Kratter & Company	Vision	Garden Grove, California	https://atkratter.com/
Atlantic Low Vision	Vision	Charleston, West Virginia	https://atlanticlowvision.com/
C TECH	Vision	Pearl River, New York	http://www.ctechlowvision.com/
Christal Vision	Vision	San Antonio, Texas	http://www.christal-vision.com/
DakotaLink	Broad	Rapid City, South Dakota	https://www.dakotalink.net/
Edith Bishel Center	Vision	Kennewick, Washington	http://edithbishelcenter.org/
Emerald Coast Vision Aids	Vision	Pensacola, Florida	http://www.ecvastore.com/
Envision Technology	Vision	Bethesda, Maryland	http://www.envisiontechnology.org/
EYE Can See	Vision	Indianapolis, Indiana	http://eyecanseeinc.com/
Florida Vision Technology	Vision	Ft. Lauderdale, Florida	http://www.floridareading.com/
Johns Hopkins Wilmer Eye Institute	Vision	Baltimore, Maryland	https://www.hopkinsmedicine.org/wilmer/
Kendall Optical Center	Vision	Miami, Florida	http://kendalloptical.com/
Louisiana Association for the Blind	Vision	Shreveport, Louisiana	https://lablind.com/
Low Vision Specialists of Maryland & Virginia	Vision	Timonium, Maryland	https://lowvisionmd.org
Magnifiers and More	Vision	Mentor, Ohio	https://magnifiersandmore.net/
Magnifying America	Vision	Ocala, Florida	https://www.magnifyingamerica.com/
Miami Lighthouse for the Blind	Vision	Miami, Florida	https://www.miamilighthouse.org/
Monroe Speech Designs	Comm.	Rochester, New York	https://monroewheelchair.vgmforbin.com/ products-services/monroe-speech-designs

Entity	Focus Areas	HQ	URL
NanoPac	Broad	Tulsa, Oklahoma	https://nanopac.com/
NorthState Assistive Technology	Broad	Paradise, California	http://northstateat.com/
Palmer Vision	Vision	Suwanee, Georgia	https://www.palmervision.com/
Pride Mobility Products	Mobility	Exeter, Pennsylvania	https://www.pridemobility.com/
Quintex Low Vision of Asheville	Vision	Asheville, North Carolina	https://www.quintexofasheville.com
Rancho Mirage Eye Care Optometry	Vision	Rancho Mirage, California	https://www.ranchomirageeyecare.com
RAZ Mobility	Mobile AT Devices	Tysons Corner, Virginia	https://www.razmobility.com/
Sage Vision	Vision	West Chester, Pennsylvania	https://www.sagevisiontech.com/
St. Louis Society for the Blind and Visually Impaired	Vision	St. Louis, Missouri	https://www.slsbvi.org/
Sterling Adaptives	Broad	Santa Rosa, California	https://sterlingadaptives.com
Tennessee Low Vision	Vision	Franklin, Tennessee	https://tennesseelowvision.com/
The Chicago Lighthouse	Vision	Chicago, Illinois	https://chicagolighthouse.org/
The Low Vision Store	Vision	Vancouver, Washington	https://www.thelowvisionstore.net/
ViewFinder Low Vision Resource Center	Vision	Sun City, Arizona	http://viewfinderlowvision.com/
Vision Matters	Vision	Woodinville, Washington	http://www.visionmatters.net/
VisionCam	Vision	Norwood, Massachusetts	http://visioncam.life/
Wagner Macula & Retina Center	Vision	Southern Virginia and Elizabeth City, North Carolina	https://www.wagnerretina.com/
Wayfinder Family Services	Vision	Los Angeles, California	https://www.wayfinderfamily.org/
Woodlake Technologies	Broad	Chicago, Illinois	https://www.woodlaketechnologies.com/

Appendix 4: Rehabilitation Centers and Hospitals

Center	Specialty Areas and URL	# of Beds:	HQ
Boston Children's Hospital	Caring for children who have chronic pain due to a variety of conditions, including complex regional pain syndrome, neuropathic pain, headaches, abdominal pain and musculoskeletal pain. http://www.childrenshospital.org/centers-and-services/programs/oz/pediatric-pain-rehabiliation-center-program		Boston, Massachusetts
Burke Rehabilitation Hospital	Burke provides inpatient and outpatient rehabilitation for a broad range of neurological, musculoskeletal, cardiac and pulmonary disabilities caused by disease or injury. Burke treats patients who have experienced stroke, spinal cord injury, brain injury, amputation, complicated fracture, arthritis, cardiac and pulmonary disease and neurological disorders. https://www.burke.org/	150	New York, New York

Center	Specialty Areas and URL	# of Beds:	HQ
Johns Hopkins Department of Physical Medicine and Rehabilitation	A team of experts specializing in rehabilitation care for amputation, spinal cord injury and dysfunction, complex medical conditions, brain injury and illness, musculoskeletal injury and stroke. https://www.hopkinsmedicine.org/physical_medicine_rehabilitation/about_us/	18	Baltimore, Maryland
Kennedy Krieger Institute	Kennedy Krieger Institute is an internationally recognized institution dedicated to improving the lives of children and young adults with pediatric developmental disabilities and disorders of the brain, spinal cord and musculoskeletal system through patient care, special education, research and professional training. https://www.kennedykrieger.org/	50	Baltimore, Maryland
Kessler Institute for Rehabilitation	Providing the highly specialized care, advanced treatment and leading-edge technologies that enable individuals with spinal cord injury, brain injury, stroke, amputation, neurologic diseases, musculoskeletal and orthopedic trauma, cancer and cardiac conditions to rebuild their lives. https://www.kessler-rehab.com/	152	New Jersey (multiple locations)
Massachusetts General Hospital Department of Physical Medicine and Rehabilitation Service	Physiatrists have dual clinical appointments through the Spaulding Rehabilitation Hospital. Special areas of expertise include spinal cord injury, traumatic brain injury, stroke, neuromuscular, orthopedic, amputation, complex medical rehabilitation, chronic pain and spine disorders. https://www.massgeneral.org/physical-medicine-rehabilitation		Boston, Massachusetts
Mayo Clinic	Specialists in Physical Medicine and Rehabilitation (PM&R) help restore movement and function to people disabled by disease or injury. PM&R physiatrists diagnose and treat a variety of medical conditions affecting the brain, spinal cord, nerves and musculoskeletal system. https://www.mayoclinic.org/departments-centers/physical-medicine-rehabilitation-mayo-clinic/sections/overview/ovc-20467039		Multiple locations
MossRehab	Implementing a complete continuum of care from inpatient to community re-entry for patients living with the effects of amputation, communications disorders, mobility disorders, spinal cord injury, stroke, neurological disease and traumatic brain injury. https://www.mossrehab.com/		Elkins Park, Pennsylvania
Mt. Sinai Rehabilitation Hospital	Hosts a nationally recognized staff of rehabilitation specialists in physiatry, speech and language pathology, orthopedics, otolaryngology, urology, neurology and neuropsychology, social work and counseling, pharmaceutical sciences and physical, occupational and recreational therapy. https://www.trinityhealthofne.org/location/mount-sinai-rehabilitation-hospital-1	60	Hartford, Connecticut
Rusk Rehabilitation at NYU Langone Health	At its inpatient and outpatient locations, Rusk Rehabilitation works with people who have a variety of diagnoses and treatment needs related to brain injury, cancer, cardiac and pulmonary conditions, chronic neurological conditions, limb loss, orthopedic and musculoskeletal conditions, pediatric conditions and injuries, spinal cord injury and stroke. https://nyulangone.org/locations/rusk-rehabilitation	174	New York, New York
Shepherd Center	Specializes in the treatment of spinal cord injury, brain injury, stroke, chronic pain, multiple sclerosis and other neuromuscular disorders. https://www.shepherd.org/	152	Atlanta, Georgia
Shirley Ryan AbilityLab, formerly the Rehabilitation Institute of Chicago (RIC)	Innovation centers each focused on a specific area of biomedical science with extraordinary promise, including brain, spinal cord, nerve, muscle and bone, pediatric and cancer. https://www.sralab.org/		Chicago, Illinois

Center	Specialty Areas and URL	# of Beds:	HQ
Spaulding Rehabilitation Network	At the forefront of innovative treatment for major disabling conditions, including spinal cord injury, traumatic brain injury, other traumatic injuries, stroke and neuromuscular disorders such as multiple sclerosis, cerebral palsy and Parkinson's disease. https://spauldingrehab.org/	132	Boston, Massachusetts
TIRR Memorial Hermann Rehabilitation & Research	Offering inpatient and outpatient rehabilitation for brain injury, spinal cord injury, stroke and neurologic disease. http://tirr.memorialhermann.org/	134	Houston, Texas
UW Medicine Rehabilitation Medicine Clinic at Harborview	Assisting patients with physical and cognitive problems and a range of conditions, including stroke, spinal cord injury, brain injury, cerebral palsy, muscular dystrophy, amputations, post-polio, pain and neurological disorders, musculoskeletal disorders and cancer-related disabilities including neuro-oncology. https://www.uwmedicine.org/	24	Seattle, Washington
Virginia Rehabilitation Center for the Blind and Vision Impaired	Adjustment training in skills that will allow persons who are vision impaired or blind to function as independently, safely and efficiently in society as possible, provided in an atmosphere of open communication, teamwork and trust. https://vrcbvi.org/	34	Richmond, Virginia

Appendix 5: Universities

Entity	Description and URL	Location	Comment
Georgia Tech Tools for Life	Tools for Life, Georgia's Assistive Technology Act Program, is dedicated to increasing the access to and acquisition of assistive technology devices and services for Georgians of all ages and disabilities so they can live, learn, work and play independently and with greater freedom in communities of their choice. https://gatfl.gatech.edu/tfl.php	Atlanta, Georgia	Part of an active Atlanta-based assistive technology ecosystem.
Coleman Institute for Cognitive Disabilities at the University of Colorado	The Coleman Institute for Cognitive Disabilities works to catalyze and integrate advances in technology that promote quality of life for people with cognitive disabilities and their families. https://www.colemaninstitute.org/	Boulder, Colorado	An academic thought leader via white papers and academic studies.
University of Maryland Trace Research and Development Center	The Trace Center is a leader in the development and large-scale pilot implementation of the Global Public Inclusive Infrastructure (GPII) to simplify access to information and communication technology by people with disability, literacy, digital literacy and aging-related barriers. https://trace.umd.edu/	College Park, Maryland	A highly experienced team of accessibility researchers.
University of Pittsburgh Department of Rehabilitation Science and Technology	Students work alongside designers, engineers and clinical professionals to explore career options in rehabilitation science and technology, such as designing the next generation of wheelchair, adapting a bicycle so it can be ridden by someone with one leg and counseling people with disabilities to better understand their challenges and help them find new solutions. https://www.shrs.pitt.edu/rst	Pittsburgh, Pennsylvania	Promoting careers in the accessibility space.

Appendix 6: Online Retailers

Entity	Location	URL
AbleMart	Millerstown, Pennsylvania	https://www.ablemart.com/
Atvisor*	Ramat HaSharon, Israel	https://www.atvisor.ai/
Harris Communications	Eden Prairie, Minnesota	https://www.harriscomm.com/
Independent Living Aids	Buffalo, New York	https://www.independentliving.com/
MaxiAids	Farmingdale, New York	https://www.maxiaids.com/

^{*}It is important to note that Israeli company Atvisor is not merely an online retailer but also a consultation platform. **Every Israeli assistive tech entrepreneur should list on Atvisor.**

REPORT SPONSORS





through philanthropy.

in early-stage companies and to support sector development

Start-Up Nation Central is an independent nonprofit that builds bridges to Israeli innovation. It connects business, government and NGO leaders from around the world to Israeli innovation through both highly customized business engagements and Start-Up Nation Finder, an easy to use, up-to-date, free online platform for discovering and connecting with thousands of relevant innovators.

REPORT AUTHOR



Jon Polin Israeli Network of Life-Enhancing Technologies (INLET)

Just as an inlet connects a smaller body of water to a larger one, INLET acts as a conduit to bring the best life-enhancing technologies from Israel to seniors and persons with disabilities worldwide.

For questions about this report, please contact jon@inlet.co.il or jonpolin@gmail.com.

