



DEEP DIVE: Takeaways from Our Trip to Israel— Tech Ecosystem Collaboration Strategies and Notable Startups

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- 1) The Fung Global Retail & Technology team traveled to Israel to meet with local startups that are disrupting the retail space and to gain a deeper understanding of how multinational companies operate within Israel's booming technology ecosystem.
- 2) Israel has been known for several years as "Silicon Valley II"—and for good reason. The country invests 4.4% of its GDP into research and development (the highest R&D investment rate in the world), and 30% of that is channeled through its universities. Since 1980, more than 250 Israeli companies have gone public on the tech-focused Nasdaq Stock Exchange. After the US and China, Israel is the most represented country on the Nasdaq.
- 3) In recent years, multinational companies looking to establish an innovation hub have increasingly chosen to build in Israel. More than 250 global companies, including 80 Fortune 500 companies, have R&D labs in Israel today. During our visit, we met with executives from Kimberly-Clark, Sears, Coca-Cola and NCR.
- 4) There are several modes of opportunity to engage in the Israeli ecosystem through venture capital funds, micro-funds and crowdsourced funding and, for multinational companies, through factories, R&D centers and/or software houses. Some of Israel's technology strengths include enterprise software, cloud technologies, virtualization, hardware and cybersecurity.



- 5) Kimberly-Clark's Digital Innovation Lab (D'Lab) has offices in the US, Singapore and Israel. Through the lab, the company engages with investors, startups, technology companies and the academic community to bring new ideas to the consumer goods category. The company collaborates with, partners with and acquires other companies, but does not invest in them in order to avoid shared intellectual property.
- 6) Some multinationals have built green field operations (where a parent company builds its operations in a foreign country from the ground up) in Israel, while others have acquired smaller companies to build upon. For example, Hewlett-Packard has eight R&D facilities in Israel, seven of which evolved from buyouts.
- 7) The startup companies we met with in Israel are engaged in artificial intelligence, supply chain management, virtualization, data analytics, market intelligence services, image recognition, on-demand robotics and product optimization.



Source: Shutterstock



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Executive Summary

The Fung Global Retail & Technology team traveled to Israel to meet with startups that are disrupting the retail space and to gain a deeper understanding of how multinational companies operate within Israel's booming technology ecosystem.

In recent years, multinationals looking to establish an innovation hub have increasingly chosen to build a presence in Israel. More than 250 global companies, including 80 Fortune 500 companies, have R&D labs in Israel today. Two-thirds of these companies are American tech giants such as Facebook and Apple, but the number of Chinese and South Korean players is increasing and already includes Huawei and Samsung.

Since 1980, more than 250 Israeli companies have gone public on the tech-focused Nasdaq Stock Exchange. After the US and China, Israel is the most represented country on the Nasdaq.

We traveled throughout Israel to gain a deeper understanding of how these multinationals operate within Israel's booming technology ecosystem, and met with local executives from Kimberly-Clark, Sears, Coca-Cola and NCR.



Source: Shutterstock

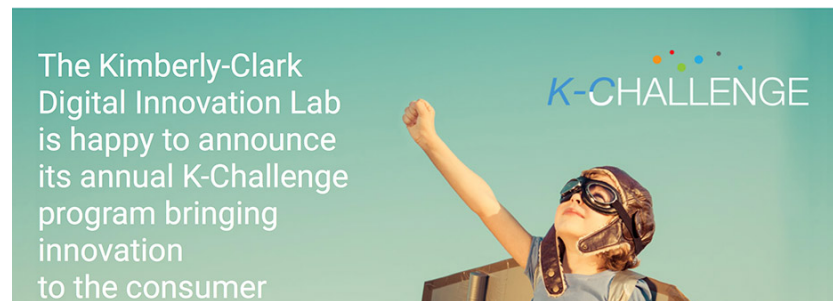
Kimberly-Clark Digital Innovation Lab: Crowdsourced Solutions for Consumer Goods Product Innovation

We met with the director of Kimberly-Clark's Digital Innovation Lab (D'Lab) at the company's WeWork office space. The director, who previously played an instrumental role in establishing AT&T's Innovation Center in Israel, is the sole member of the D'Lab team in Israel. Since introducing D'Lab in 2014, Kimberly-Clark has established an innovation footprint across the US, Israel and Singapore.

D'Lab is part of the company's global initiative to crowdsource digital solutions. Kimberly-Clark's goals with the initiative are to add value over existing products, add new product channels and improve the consumer experience. Kimberly-Clark likes the flexibility of Israeli entrepreneurs and their willingness to adjust a solution in order to find the proper fit. "The unprecedented rate of consumer change driven by disruptive technologies calls for relentless innovation," the director told us.

D'Lab engages with investors, startups, technology companies and the academic community to bring new ideas to the consumer goods category. The company collaborates with, partners with and acquires other companies, but it does not invest in them, in order to avoid shared intellectual property.

Recently, the company hosted a hackathon competition focusing on baby and childcare product innovation. Eleven startups participated, and Kimberly-Clark selected six teams to collaborate with various of its brands on pilot programs.



Source: Kcdlab.com

When asked "Why Israel?" Kimberly-Clark's D'Lab director said that the country invests 4.4% of its GDP into R&D (the highest rate in the world), and that 30% of that is channeled through the country's universities.

During the conversation, the question "Why Israel?" came up. Kimberly-Clark's director noted that the country invests 4.4% of its GDP into R&D (the highest rate in the world), and that 30% of that is channeled through the country's universities. As a result, Tel Aviv University, the Weizmann Institute of Science and the Technion are among the top 10 patent applicants in the US. The director also cited Israel's mandatory military service as a crucial driver of its vibrant startup scene.

In addition, the D'Lab director said that operating in Israel requires only a third of the initial investment to realize the same gains compared with other countries. These factors have created an ecosystem of vast talent and fast development that Kimberly-Clark found appealing.



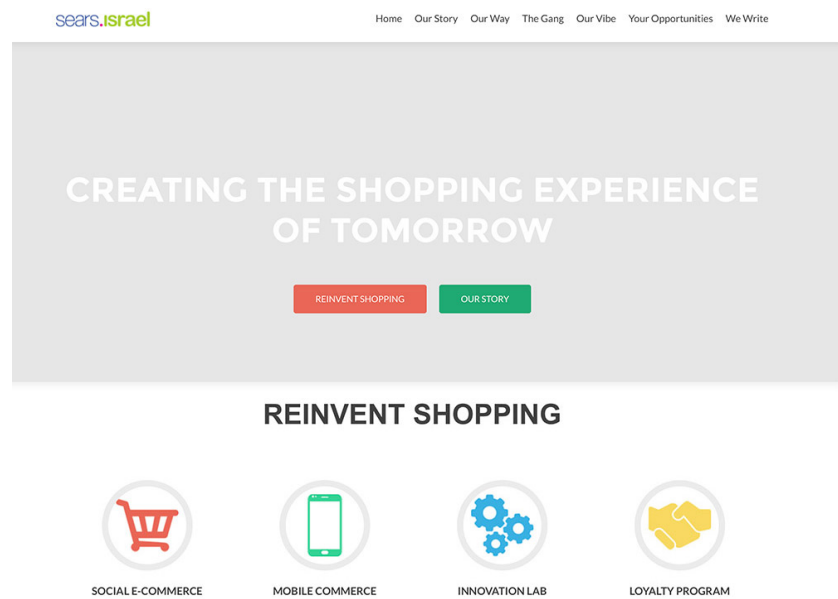
The innovation manager at Sears Israel noted that some multinationals build green field operations (where a parent company builds its operations in a foreign country from the ground up), while others acquire smaller companies that they then build upon.

Sears Israel: Creating Innovative E-Commerce Experiences

Sears Israel is a subsidiary of Sears Holdings that focuses on creating innovative e-commerce experiences. We met with an innovation manager at Sears Israel, who discussed how some multinationals build green field operations (where a parent company builds its operations in a foreign country from the ground up), while others acquire smaller companies that they then build upon. For example, Hewlett-Packard has eight R&D facilities in Israel, seven of which evolved from buyouts.

Sears acquired an Israel-based social commerce company eight years ago and has built the team from 10 people to 150 people, who focus on product strategy and R&D. The team developed Shopyourway.com, the loyalty/reward website of Sears and Kmart.

The innovation team presents Sears management with ideas on a monthly basis. Sears Israel also works with Sears's partners. For example, the team is currently working with Kenmore (which provides appliances to Sears) to develop a loyalty mechanism that is similar to Amazon's Dash Button.



Source: Sears.co.il



Coca-Cola's Bridge Accelerator Program: Internal Participation and Mentorship Is Key for Development

The Bridge by Coca-Cola is a seven-month accelerator program for startups. The accelerator identifies and supports startups that match the needs of Coca-Cola. The program's five core themes are consumer engagement, consumer retail, supply chain, marketing innovation, and health and wellness.

We met with the cofounder and manager of The Bridge, who started the conversation by discussing the importance of working with internal business divisions and customers to understand the challenges of the business before beginning the program and choosing the cohort. He also stressed the



To elevate internal participation in The Bridge accelerator program, Coca-Cola executives have invested capital, the cofounder and manager of The Bridge said, noting that “now they are invested and want to be part of the startup-filtering process and engage with the companies.”

importance of internal participation during the development and piloting stages. To elevate internal participation in The Bridge, Coca-Cola executives have invested capital in the program, the manager said, noting that “now they are invested and want to be part of the startup-filtering process and engage with the companies.”

The manager said that many startups are missing the brand-storytelling component. “They are able to raise the money, [but] then decline because they aren’t good storytellers,” he said. The Bridge provides targeted commercial guidance from an enterprise perspective. Startups are given in-depth marketing and negotiation training from Coca-Cola/Turner, and given access to internal and external business mentors.

No equity financial investment is required and startups maintain ownership of their intellectual property. The Bridge seeks to gain first-mover advantage through the development of strong relationships with innovative software technology startups by supporting and facilitating their path to commercialization. So far, The Bridge has conducted 90 pilots and signed 25 license agreements, including four global license agreements.



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The Bridge is a unique Commercialization



Source: TheBridgebyCocaCola.com



NCR Innovation Center: Using Israeli Startups to Provide Software Solutions for Global Retailers

On our trip, we also traveled to the city of Ra'anana to visit NCR's Innovation Center. NCR is an American company that makes computer hardware, software and electronics that facilitate point-of-sale transactions. We met with NCR's regional VP of sales and Software Innovation Site manager, who said that NCR was attracted to Israel because of the collaborative mentality in the country's business sector and because it is home to a large number of R&D centers.

In 2012, NCR acquired Israel-based Retalix, a leading provider of software solutions for retail companies. Since then, NCR has added more than 200 new employees and now has a workforce of more than 1,000 in Israel.

The company is working with local partners to further develop its NCR Retail ONE commerce hub. The commerce hub (announced in June 2015) unites an open ecosystem of retail applications and data with an omnichannel software platform. Essentially, NCR has created a platform similar to the Apple App Store: it enables retailers to work with technology companies that are approved by NCR.

The open nature of the new system allows retailers to differentiate their businesses in an increasingly competitive retail environment, using existing assets. NCR's local retail solution manager commented that "outsourcing makes more sense for companies like Walmart that face declining IT budgets." The new commerce hub helps retailers get products to market faster and accelerate innovation by breaking down technology silos.

The screenshot shows the NCR website's homepage. At the top, there is a navigation bar with links for 'MyNCR', 'Language', 'Social', and 'Search'. Below this is a secondary navigation bar with links for 'Company', 'Solutions', 'Product Catalog', 'News', 'Careers', 'Blogs', 'Support', and 'Contact Us'. The main banner features the text 'Introducing NCR Retail ONE' with a sub-headline 'Unleashing the full potential of retail everywhere' and a 'Learn more' button. To the right of the banner is a large graphic of a globe with various retail icons. Below the banner, there is a section titled 'Explore Retail' with a paragraph about omnichannel experience and a list of bullet points. To the right of this section are three vertical cards: 'Food, Drug and Mass Merchandise', 'Petroleum and Convenience', and 'Department and Specialty Retail', each with an 'Explore more' button. On the far right, there is a green box with the text 'Discuss your options' and a 'Contact Sales' button.

Source: NCR.com



Crowdfunding Platform OurCrowd: Increasing Foreign Investment Opportunity in Israel

Our team also visited the office of OurCrowd, an equity crowdfunding platform built to enable accredited investors to provide venture capital funding for startups. The Jerusalem-based crowdfunding platform has a global network of 15,000 investors and has helped facilitate \$300 million in investments to 100 startups since it was founded in 2013.

OurCrowd selects startups to back, invests its own capital and provides the young companies with access to its global network of more than 15,000 investors.

OurCrowd operates much like a venture capital firm, vetting deals and investing in companies alongside other investors. It selects startups to back, invests its own capital and provides the young companies with access to its global network of investors. OurCrowd is trying to stay ahead of the pack by assigning industry experts as mentors to the startups and by taking board seats at its portfolio companies.

The platform has helped fulfill the growing demand for foreign investment in Israel. The cofounder and CEO said the majority of OurCrowd investments come from outside Israel. OurCrowd also works with major corporations to source startups. It is currently working with Honda to source startups that are relevant to the automaker.

The screenshot shows the OurCrowd website homepage. At the top is a navigation bar with links: Invest, Our team, How it works, Events, Blog, Offices, and a green 'JOIN' button next to 'Log In'. The main content area features a large image of a hand holding a small, black, rectangular device. Overlaid on this image is the text: 'Build a global startup investment portfolio and spark the next wave of innovation'. Below this, it says 'Access pre-vetted startup opportunities and invest alongside trusted venture capital and angel investors' and a green button that says 'Invest in the Future'. To the left of the hand, there is a section for 'Consumer Physics', noting it was 'Founded 2011' and '\$5.58M funded by OurCrowd'. At the bottom of the main content area, there is a summary of statistics: '\$300M Total Raised', '100 Companies Funded', '5,482 Companies Vetted', '15,567 Accredited Investors', and '112 Countries Represented'. On the right side, there is a 'NEWS' sidebar with several articles listed, including 'Syge in Bloomberg', 'Syge in Reuters', 'The Sydney Morning Herald', 'Zebra in VentureBeat', and 'BioCatch in Enterprise Times'. A 'More News' link is at the bottom of the sidebar.

Source: OurCrowd.com



STARTUPS

During our trip, we also met with several startup companies that are disrupting the retail industry. The teams we met with are engaged in artificial intelligence, supply chain management, virtualization, data analytics, market intelligence services, image recognition, on-demand robotics and product optimization. About 80% of the companies we met with were either based or founded in Israel. Below, we provide insights on some of the standout companies we met with during our trip.

wizer

Company:	Wizer
Sector:	Analytics
Notable Clients:	Keter, SodaStream, Brita
Website:	www.getwizer.com

Wizer is a consumer research platform that uses artificial intelligence to analyze business questions and provide fast, affordable and in-depth market insights. The platform simplifies the process of running professional market research surveys, according to the company's cofounder, Idan Geva.

With Wizer, the client poses a research question and defines goals. Then, Wizer's algorithm builds a research plan, selecting an optimized questionnaire that fields responses from a selected group. The platform pulls appropriate questions from hundreds that have already been written by human researchers, and the questions are auto-assembled into an online questionnaire of 25–30 questions. The system ensures that there is no writing required by the client's marketing team.

So, clients are able to automatically generate an online questionnaire by answering the platform's questions, and they receive results within 48 hours. Furthermore, Wizer's algorithm analyzes the survey results and their statistical significance. The startup is backed by market researcher Nielsen's incubator in Israel.



Company:	Freightos
Sector:	Supply chain, logistics
Notable Clients:	N/A
Website:	www.freightos.com

Freightos is attempting to make global shipping smoother by offering the first online international freight marketplace. The Freightos marketplace enables logistics companies to manage contracts, and automate and manage the quote and sales process, from their own website. With a mission to bring real-time quotes to the freight industry, Freightos might best be described as a Kayak or Expedia for international shippers.

Both individual users and freight forwarders can use the platform to search for and filter shipping options by price, time, route, fees involved or type of



transportation. The Freightos system replaces the old way of doing business, which relied on fax machines and Excel spreadsheets.

Freight vendors on the Freightos network can easily share rates and tariffs, allowing their salespeople, agents and customers to instantly generate even the most complex freight quotes in seconds, right from their Internet browser. Freightos says that it is able to offer more than 200 million freight pricing data points, and that it has established the largest freight rate database in existence.

The Freightos team, led by CEO Zvi Schreiber, has a strong track record of creating innovative technologies, some of which have been acquired by IBM and GE.



Company:	EZface
Sector:	Fashion technology
Product Stage:	Released
Notable Clients:	N/A
Website:	www.ezface.com

EZface provides a virtualization solution to enhance the makeup shopping experience. Consumers can virtually “try on” cosmetics, get personalized recommendations and even solicit advice from friends via the EZface app. The virtual testing platform converts digital photographs into a “virtual mirror” through which users can visualize how they would actually look while wearing various makeup products.

The company’s virtualization software decodes the product’s attributes (color value, effect, coverage, etc.), analyzes the user’s pigmentation with automatic facial-detection technology, and blends the product’s attributes with the pigmentation in the relevant makeup areas to ensure an accurate and realistic simulation.

Founded in 2000, EZface has been successfully incorporated into numerous websites and in-store kiosks worldwide, including by Walmart and L’Oréal. According to Cofounder Rami Orpaz, EZface was the first company to experiment with providing a virtual makeup experience. Now there are several beauty startups working on virtual mirrors, including ModiFace and YouCam Makeup, and L’Oréal Paris has introduced a new virtual makeup tester app called Makeup Genius.



Company:	RFKeeper
Sector:	Supply chain, inventory management, loss prevention
Notable Clients:	Global resellers
Website:	www.rfkeeper.com

RFKeeper is a provider of supply chain management and loss prevention solutions that use RFID tags. The company uses patent-pending RFID tags to provide retail chains with inventory management, loss prevention and supply chain visibility solutions that benefit both the supply chain manager and the retailer.

With the company's system, retail products are assigned RFID tags that transmit all information throughout the supply chain to the cloud. This provides the supply chain manager with improved supply chain visibility and traceability for loss prevention.

RFKeeper's end-to-end solutions enable retail chains to improve inventory accuracy, reduce shrinkage and increase shopper loyalty. The plug-and-play solutions can be deployed within hours, require minimal training and changes to retailers' current store processes, and rely on a small RFKNet Wi-Fi router for configuration within the cloud.



Company:	Panorama
Sector:	Big data analytics, supply chain analytics
Notable Clients:	Armani Exchange, Coca-Cola, L'Oréal, Philip Morris, Saks Fifth Avenue, Texas Instruments
Website:	www.panorama.com

Panorama provides analytics and self-service features such as collaborative business intelligence, contextual data discovery and process automation for business users. The company's solutions provide users with personalized, intuitive and interactive analytics that are delivered through a highly visual and understandable infographic format. The dashboard includes KPI alerts, and lets users create collaborative "workboards" and visual presentations to provide better context as they put together ad-hoc business teams to address internal issues.

The company was founded in 1993 and sold its OLAP technology to Microsoft in 1996. Panorama supports more than 1,600 customers worldwide in industries such as financial services, manufacturing, retail, healthcare and telecommunications.



Company:	Wave
Sector:	Supply chain
Notable Clients:	N/A
Website:	www.wavebl.com

Wave connects all members of the supply chain to a decentralized network and allows them to directly exchange documents. Wave's application manages ownership of documents on the blockchain, eliminating disputes, forgeries and risks. The peer-to-peer network connects all carriers, banks, forwarders, traders and other parties of the international trading supply chain. Using decentralized technologies, all communication between these parties is direct and does not pass through a specific central entity.

Currently, the supply chain process requires a bill of lading, or document issued by a carrier to acknowledge receipt of cargo for shipment. Bills of lading are one of three crucial documents used in international trade to ensure that exporters receive payment and importers receive merchandise. Wave's solution provides an innovative method for exchanging trade documents that is cost-effective, secure and designed to integrate with current workflows. The startup is backed by the Tel Aviv-based Barclays Accelerator.



Company:	Market Beyond
Sector:	Analytics
Product Stage:	Released
Notable Clients:	Keter, Rubbermaid
Website:	www.themarketbeyond.com

Market Beyond is a market intelligence services company that provides online retailers with insights into the customer purchase journey and their competitors. The company lets users tap into competitors' KPIs in order to get information about sales, conversions, average selling price across products, effective marketing channels and more. The company facilitates the gathering of big data shopping information from millions of users worldwide, allowing online sellers to ask simple questions that can unveil easy steps to boost performance, such as "What is the competition selling?" and "What new products are trending?"

**Consumer Physics****Company:** Consumer Physics**Sector:** Hardware**Website:** www.consumerphysics.com

Consumer Physics developed a handheld molecular scanner, the SciO, that allows consumers and businesses to learn about the makeup of materials in products. Users scan foods and other materials (such as vitamins and medicines) using the handheld device, and the API gathers data and offers a deep molecular analysis.

The SciO sensor pairs with SciO smartphone apps and connects to a cloud-based database of material fingerprints. Consumer Physics offers businesses and third-party developers a platform that enables them to design their own molecular-sensing models and mobile applications for personal and commercial use.

Trax
image recognition**Company:** Trax**Sector:** Analytics, information technology**Notable Clients:** Coca-Cola, Heineken, Nestlé**Website:** www.traxretail.com

The **Trax** platform is powered by image recognition technology that provides retailers with deep insights into what is happening in their store aisles. Shelf images are taken with mobile devices, fixed cameras or robots, and then analyzed in the Trax cloud. The system then sends real-time, actionable insights to store staff via their mobile devices. Online dashboards are available for business teams through Trax's business intelligence platform.

Trax provides retailers with recommendations for improving sales, such as how to change the placement of products relative to their environment in the store. Retailers turn the data and insights into broader market intelligence and highly accurate trend predictions that shine a light on new ways to improve the in-store customer experience. The company has received \$78 million in total financing to date.



Company:	CommonSense Robotics
Sector:	Supply chain
Notable Clients:	N/A
Website:	www.cs-robotics.com

CommonSense Robotics is building the first on-demand, robotic, in-the-city fulfillment solution for last-mile delivery. The solution enables one-hour delivery while reducing operational costs. Cofounder and CEO Elram Goren described the company's solutions as "micro-fulfillment centers." The company was established in 2015 and is a graduate of the Microsoft Accelerator program. CommonSense Robotics' solution is currently in the demo stage, with a live beta version set to launch in the third quarter of 2017, according to Goren.



Company:	Plataine
Sector:	Supply chain
Product Stage:	Released
Notable Clients:	GE Digital, Siemens
Website:	www.plataine.com

Plataine provides a production optimization solution for manufacturers that produce composite components for the transportation, furniture, aerospace and apparel industries. Plataine's solution is a tracking-as-a-service (TaaS) solution that bridges the gap between CAD, ERP and the production floor, effectively enabling manufacturers to digitalize the production process.

The solution allows manufacturers to schedule production tasks; track raw materials, kits and tools throughout the plant; optimally select raw materials from inventory; dynamically assign product orders to available materials; and more. The software is designed to make manufacturers more competitive by helping them improve materials utilization and productivity, control quality, and shorten manufacturing cycles to ensure on-time delivery of products to customers and create a more dynamic manufacturing environment.



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