



Future of Retail-Tech Emerging Landscape in Israel

September 2019

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Foreword

Retail is an industry in flux. Through our different roles as advisors, service providers, and investors, the authors of this report- Deloitte, Salesforce, and Nielsen Innovate- have seen our clients and collaborators struggle as the sector changes. This has driven us to evaluate the landscape and identify solutions needed to thrive in this new era of retail. In this report we will discuss what drives the flux, how it impacts retailers, and what resources are available to help them come out on top. We have mapped Israeli Retail-tech companies using latest technologies, and have looked at them through a solution-focused lens designed around retail and CPG challenges and business needs.

About Deloitte

Deloitte is a multinational professional services network providing a diverse set of clients with offerings ranging from tax and audit to strategy consulting and analytics services. Retail is one of the largest sectors in Deloitte, with over 13 thousand global team members specializing in Retail and Consumer Products who serve 80% of the Retail, Wholesale, Distribution, and Consumer Products companies on the Fortune Global 500.

About Nielsen Innovate

Nielsen Innovate Fund (NIF) is an early stage incubator and investment fund that specializes in retail, research, marketing and media technologies. As pioneer fund investing in retail tech in Israel, Nielsen Innovate is a natural partner in creating this report with a total of 33 investments since 2013, 16 of which are retail and CPG focused. Backed by Nielsen and its deep knowledge of the landscape, NIF scales-up early stage startups into global companies by investing in next-generation rising technologies.

About Salesforce

Salesforce is the global leader in Customer Relationship Management (CRM), bringing companies closer to their customers in the digital age. Founded in 1999, Salesforce enables companies of every size and industry to take advantage of powerful technologies—cloud, mobile, social, internet of things, artificial intelligence, voice and blockchain—to create a 360° view of their customers.

Introduction

The foundation of retail has remained stable over the last 80 years, with a classic value chain and brick & mortar stores focused on local markets. However, the sector is now experiencing disruption caused by new types of channels, technologies, consumer expectations, and other market forces. The threat is all-the-more felt as retail is an industry with traditionally low margin. Retailers that are unable to anticipate and adapt to shifting trends will be left behind.

As the structure of the market and consumer expectations change, many retail and consumer products businesses are turning to technology to reshape the way they work and how they serve their customers. Turning to technology can be an impactful move that supports business strategy, solves key challenges, and enables new growth paths - if it is done right.

First, selection or development of technology solutions must be in line with the overall business aspiration, relevant to the chosen market and customer segments, and take into account existing channels and assets. Tech can contribute to all aspects of a business from marketing and sales, to check out and payments, to supply chain and operations. Retailers and brands need to choose an area of focus that will create the most value. For instance, a company aspiring to make real-time data-driven decisions can adopt AI and machine learning solutions that provide continuous insights and predictions, a company striving for increased efficiency can use digital tools for inventory management and customer support, and a company that reaches consumers through physical stores can leverage existing locations by converting traditional shops to digitally connected experiential hubs that are part of a complete omni-channel experience.

Second, finding the right technology is never enough. To reap the full benefits of an innovative solution, retailers and brands must learn to effectively embed it into the core of their businesses. Technology must be tested in pilots and implementation must be rolled out according to a strategic plan. Implementation must take into account legacy systems, corporate culture, and existing processes. Finally, after technology is implemented, the tech should be capitalized on; the data gathered, insights gained, new processes enabled, or new channels opened must be properly evaluated to contribute to future business moves and decisions.

Israel is a key player in retail-technology. Building on an established reputation as the startup nation, Israel is now attracting investors and multinationals specifically focused on retail. Over 450 of Israel's retail-tech startups have collectively raised over \$1 Billion in equity investments, and

multi-national retail and CPG companies are establishing R&D centers in the country. Such momentum is leading to the development of even more innovative¹ technologies.

Deloitte Catalyst is leveraging the growing retail-tech ecosystem in Israel to help global companies find and connect with the right startups to address their specific needs. With the support of Deloitte's global consulting services, Catalyst will build relationships, design tailored solutions, and support implementation.

Deloitte Catalyst helps enterprises, governments, and startups – from early stage to high growth – to innovate, scale and deliver transformative value faster. With presence in the US, Israel and expanding geographies, Catalyst has the leading network, relationships, and capabilities to be a trusted partner that makes a global ecosystem of technologies and innovators locally accessible to deliver the unmet needs of each client's business and its customers. We take the isolation out of innovation by connecting clients – and co-developing solutions – with a world- wide community of catalysts that accelerate how innovation transforms your business to lead how our world is changing.

1. Retrieved from: www.startupnationcentral.org

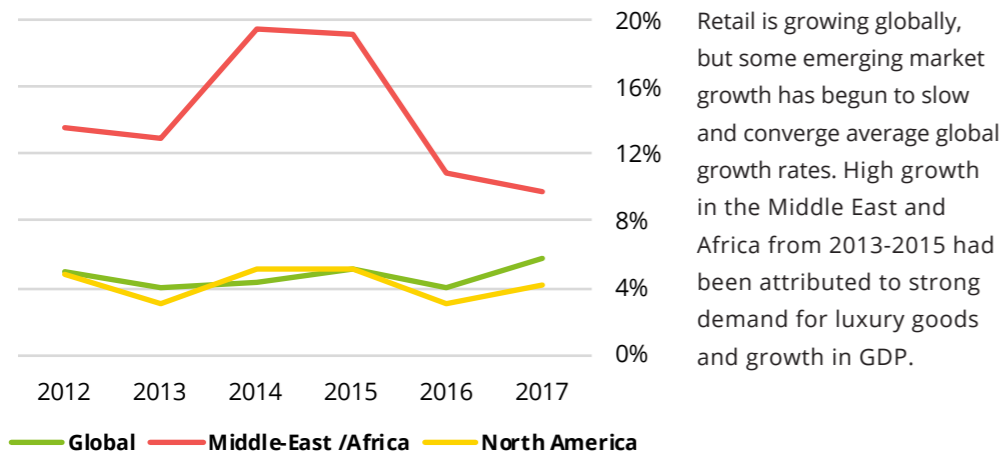
The Global Retail Market

Retail market results and trends

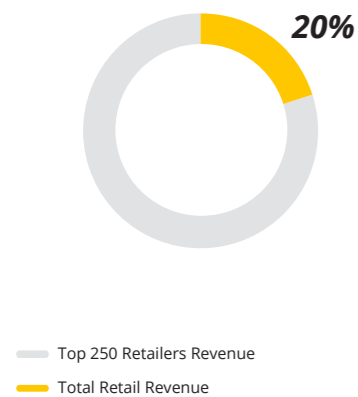
Despite technological disruption, total global retail revenue continues to grow, increasing by 5.8% between 2016-2017 and resulting in US\$22.6 trillion.¹ Within the industry, the 250 largest retailers each show a minimum Retail Revenue of US\$3.7 billion. Although disparities in the rate of retail growth still exist between different geographic regions, these rates are starting to converge.

Retail growth Regionally

Year on Year growth

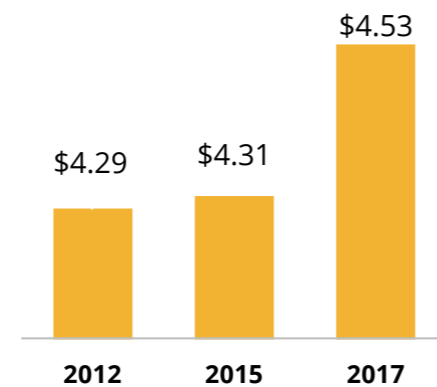


Top 250 Retailers share of Global Retail Revenue (2017)



Growth of Revenue for the Top 250

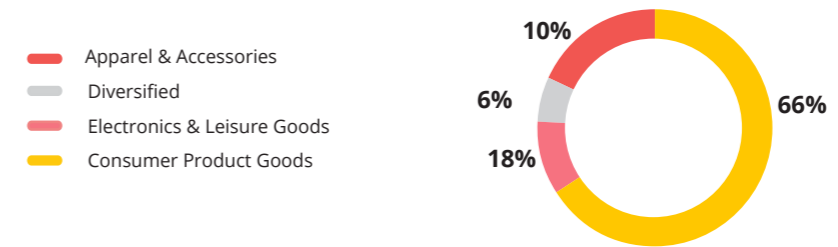
(in trillion USD)



The four different product categories

In Deloitte's annual global survey of the retail sector we divide the market in four categories – Consumer Product Goods (CPG), Apparel & Accessories, Electronics & Leisure Goods and Diversified. Diversified players are retailers who sell across categories that do not have one product category that constitute 50% of sales. Nearly two thirds of total global retail revenues are generated by the CPG category.

Share of Top 250 Revenue (2017)



	Growth in Revenue	Growth in Net profit margin	Growth in Share of total retail revenue
Consumer Product Goods	5%	2%	0%
Electronics & Leisure Goods	10%	3%	1%
Apparel & Accessories	10%	6%	1%
Diversified sector	7%	2%	-2%

The diversified sector is the only sector with declining growth. In today's disrupted market, niche players with a selected target audience and specific product offering, such as direct to consumer make-up brands, are performing better than multi-category retailers, such as department stores.

2. eMarketer's, Worldwide Retail and Ecommerce Sales Updated Forecast and New Mcommerce Estimates for 2016—2021

unless otherwise specified, the data on this page is from Deloitte (2019), Global Powers of Retailing 2019

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Staying on top: Selling online and global

Trends identified among both the largest and the fastest growing retailers are significant online sales and globalization

International sales

24% of the top 250 retail revenues comes from international sales

Online sales

10% of all global retail revenue comes from online sales³

International online sales

Are expected to grow 25% per year till 2020⁴

The Top 5 companies

As the only new company to join the top 5 largest retailers list, Amazon embodies the successful recipe of being both global & focused on e-commerce.

Traditional players are also evolving with similar moves, with the two market leaders, Walmart and Costco, exemplifying this strategy in 2017. Walmart, which already operates in 28 countries, expanded its online presence thanks to the acquisitions of websites Jet, ShoeBuy, Moosejaw and ModCloth, while Costco continued international expansion with new operations in France and Iceland in 2017 and saw its online sales grow 32% in 2018.^{5, 6, 7}

Company	Category	Revenue CAGR (2012-2017)	# countries with operations	# stores opened or closed (2017)
Walmart Stores, Inc.	Hypermarket	1.3%	29	+167 ⁸
Costco Wholesale Corporation	Wholesale	5.4%	12	+23 ⁹
The Kroger Co.	Supermarket	4.2%	1	-14 ¹⁰
Amazon.com, Inc.	Online store	18.0%	14	Future plans by 2020
Schwarz Group	Discount store	7.5%	30	+276 ¹¹

Growing fast: Digitizing the business

While the Top 10 fastest growing retailers do not constitute the top 10 companies by revenue, these companies successfully seize the opportunities that our digital era provides, challenge the traditional industry borders and have become forerunners in innovation.

Cross border business models thrive on **data diversity**

4 of the 10 fastest growing retailers solely sell online comes from online sale

Top 10 fastest growing retailers

Company	Category	Revenue CAGR (2012-2017)
Albertsons Companies, Inc.	Supermarket	74.4%
Vipshop Holdings Ltd	Online store	73.8%
JD.com, Inc.	Online store	52.4%
Wayfair, Inc.	Online store	51.0%
A101 Yeni Magazacilik A.S	Discount store	46.4%
Reliance Industries Ltd	Supermarket	44.8%
Action Nederland BV	Discount store	31.4%
Zalando SE	Online store	31.1%
Hudson's Bay Company	Department store	28.6%
Lenta Group	Hypermarket	27.1%

The e-commerce Chinese giant JD.com funds research in AI technology, robotics and computer vision at Stanford University. Thanks to the investment in R&D and the broad collection of data gathered from their e-commerce, JD.com opened a chain of fully automated high-tech supermarkets in 2018.¹¹ Zalando, the online shoe store turned into a multi-billion fashion powerhouse, uses its set of digital and strategic know-how to offer operating and marketing services to partner brands.¹² These modern companies demonstrate how, thanks to a diverse array of data and technological skills, new business models blur the clear-cut borders of an industry in a digitally interconnected world.

unless otherwise specified, the data on this page was collected from Deloitte (2019), Global Powers of Retailing 2019

3. eMarketer's (2016), Worldwide Retail and Ecommerce Sales Updated Forecast and New Mcommerce Estimates for 2016—2021

4. International Post Corporation (2016), State of e-commerce: global outlook 2016-21

5,8 Walmart(2017), Annual Report

6,9 Costo (2017), Annual Report

7 Costo (2018), Annual Report

10 Kroger(2017), Kroger fact book

11 The Institute of Grocery Distribution IGD (2018), Lidl and Kaufland 2017 financial results

unless otherwise specified, the data on this page was collected from Deloitte (2019), Global Powers of Retailing 2019

11 The JD AI research website air.jd.com

12 Zalando Press Releases (19.06.2017)

Forces Driving Change in Retail

The retail disruption is driven by shifts both from market pressures and consumer preferences. Traditional players now face new types of competition that have shifted customer expectations

The retail market : current challenges

Market Forces

PACE OF DEVELOPING PRODUCTS & SERVICES
 CHANGING **ECONOMIC** PRESSURES
COMPETITION BREAKING TRADITIONAL BOUNDARIES

Consumer Forces

FRAGMENTED **CONSUMER ATTENTION**
 DEMAND FOR **PERSONALIZED** EXPERIENCE
 RISE OF THE **CHANNEL OVER BRAND**

The drivers from both market and consumer sides are driving the retail market to shift towards new models that value new types of assets and new ways of working. To address these changes incumbents must develop or acquire new characteristics and change their perspective on which assets hold the most value

	OLD CHARACTERISTICS		NEW CHARACTERISTICS
KEY ASSET	Physical	→	Data & Consumer Engagement
KEY CAPABILITIES	Self-contained	→	Collaborative
KEY FOCUS	Product Oriented	→	Customer Centric
KEY SUCCESS FACTORS	Large & Structured	→	Lean & Agile

How to get there?

Most retailers and CPG companies will not be able to quickly make the shift from old to new ways of working on their own. By collaborating with and implementing technology by retail-tech startups, incumbent firms can speed up the transition process and embed more innovative solutions. Empowered by startup technology, firms can then evaluate new business models and integrate ways of working needed to fully make the shift.

Mapping Israeli Retail-Tech

Israel is a hub for new technologies

Israel presents three key differentiating elements that fuel a unique innovation ecosystem

Society

Very casual and open environment, **encouraging everyone to be critical** and creative

Government

Provides **subsidies for large R&D investments** and takes on a significant part of the risk by providing equity-free initial funding to early-stage startups

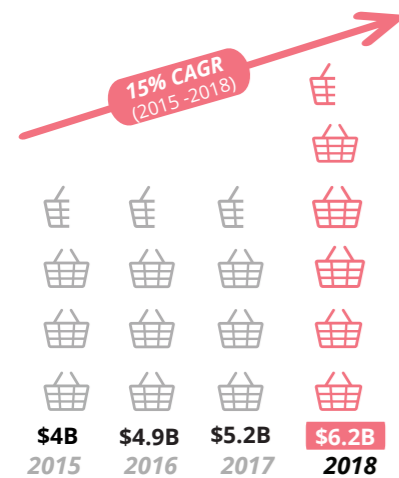
Military

The military unit 8200 is **an elite cyber and intelligence unit.**

"The best tech school on earth is Israeli army unit 8200"

- Business Insider

Applying Israeli technology to the retail sector



World's highest R&D as % of GDP (4.25%)¹⁴

Applying Israeli technology to the retail sector

6,600 active startups included **450+** retail-tech startups

The established Israeli startup and R&D landscape has developed leading capabilities in AI, ML, computer vision, robotics and big data. This technology expertise is being applied to identify the needs of retailers and to create ground-breaking technology solutions.

unless otherwise specified, the data on this page is from the independent non-profit organization Startup Nation Central
14. World Economic Forum Article on the Middle East and North Africa

The nation attracts great local and global investments

Total investments in Israeli retail-tech 8



12% of global investments in retail-tech went to Israeli companies in 2018

9% of all investments in Israeli startups went to retail-tech companies

International investments

The top 10 retail funding deals each exceeded \$16M in 2018. After Israel, the US is the top investor in 2018-2019.

Target Company	Origin of Investment	Amount
Trax	China, UK	\$125M
Endor	Israel	\$45M
Freightos	US, Singapore, Israel	\$44M
Dynamic Yield	Israel, Korea	\$37M
Bringg	US, Israel	\$25M
YOOBIC	US, UK	\$25M
Twine	Israel	\$22M
CommonSense Robotics	US, Israel	\$20M
Global-e	UK, Germany, Israel	\$20M
CB4	US	\$16M

the data on this page is from the independent non-profit organization Startup Nation Central

The Israeli startup ecosystem consists of a vibrant and diverse pool of retail-tech companies. The 450+ retail-tech startups in Israel have collectively raised more than \$1B in equity investment. A large pool of active Venture Capital firms, Labs & Accelerators nurture, support and invest in these companies.

LABs, Accelerators & Hubs



Active Venture Capitals



the data on this page was collected from the independent non-profit organization Startup Nation Central

Multinational retail, CPG, and technology companies are involved in Israeli retail-tech on several levels

High Commitment



Exploration

The past two years were marked by major acquisitions of Israeli companies by multinational retailers & technology companies, establishing Israeli technology as a source of innovation for the global retail market.

Major M&A Activity in Israel 2017-2019

Acquisitions				
Target Company	Acquirer/Investor	Description	Date	Amount
 DYNAMIC YIELD		AI-powered Personalization Platform	March 2019	\$300M
 INFINITY		Augmented reality (AR) engine for mobile apps	March 2019	~\$40M
ASPECTIVA		AI for Analyzing Consumer Opinions	Feb 2019	N/A
Tapingo		M-commerce application for food ordering and delivery	Sep 2018	\$150M
UPSTREAM COMMERCE	 	Prescriptive analytics and competitive intelligence insights	Sep 2018	~\$50M
 datorama		Marketing analytics that combine several data sources into a single source	July 2018	\$850M
 ZOOZ		Payment Consolidation Platform for Merchants	July 2018	\$80M
Invertex		3D scanning to customize online experiences and product lines	April 2018	N/A
 Visualead		Visual QR code generator that provides secure connections for industry	Nov 2017	~\$50M
 R2NET		Visualizations for Jewelry E-Commerce	Aug 2017	\$328M

the data on this page was collected from the independent non-profit organization Startup Nation Central

Retail-tech Solutions

Israeli retail-tech companies provide the tools to tackle the challenges posed by the changing retail market. From finding the right customers, to making the right offers, to removing barriers to purchase and optimizing operations, these startups have detected the specific issues that require new solutions.

We have identified and evaluated hundreds of retail-tech companies. Based on our ongoing relationships with leading retail and CPG companies and understanding of their current business needs, we have clustered the retail-tech companies by the needs they address.

Each cluster, or solution area, contains multiple companies that address similar business needs from different perspectives or using different technologies. **We will dive into each solution area in the following pages of this report, describing the needs they address, the issues they solve, and showing examples of how they have been implemented.**

MARKETING & SALES

Leveraging new technologies to boost the top line, create and capitalize sales opportunities. Solutions focused on leveraging data for everything from finding the right consumers to helping them find the right product- driving sales as well as consumer loyalty and brand value.



Mass Moves

Transform market, company and aggregated customer data into valuable strategic insights



Granular Action

Leverage customer data to personalize the full customer journey and offering



Keepers

Optimize sales by providing thorough information about the product and encourage up-sales and cross-sales

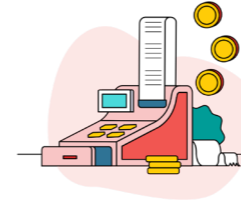


Finders

Quickly and correctly help customers find what they are looking for when they enter the store or site

CHECKOUT

Solutions that lessen the pain of paying with streamlined, flexible, and worry-free options online and in-store, enabling consumers' frictionless experience and capturing maximal deals for retailers and brands, in the safest way.



Quick & Convenient

Make the checkout and payment process seamless and flexible



Safe & Secure

Guarantee the customer's security against online fraud

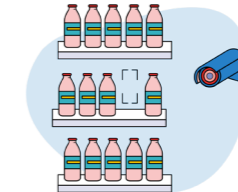
AUTOMATION & EFFICIENCY

Buzzed-about technologies such as IoT, computer vision, and robotics that track, move, and restock faster and with less waste, enabling a better consumer experience down the line, while letting retailers activate their supply chain in a cost-effective, modular manner.



Warehouse & Wheels

Transform the traditional warehouse, shipping and delivery into a smart and digital business unit



In-store Operations

Make inventory management and workflows more efficient and transparent



Mass Moves

Mass Moves

What is this solution area?

Use data to understand the big picture. Make decisions regarding product mix, merchandising, pricing and more using market, customer, store, and site data.

Why were these solutions built?

A variety of business and operations decisions impact sales, profit, risk and overall efficiency. Most of these decisions can and should be based on data. However, while retailers have large amounts of data, they lack the ability to create value from it.

How do these solutions address retailers' challenges?

01 || Pace of developing products and services

- Big picture customer insights and prediction tools inform quicker development by giving retailers a good idea of what customers are likely to buy even before production
- Data quickly lets retailers know if a product is successful or failing allowing them to take action quickly
- Live feedback lets retailers test and select services that are creating the most added value

02 || Changing **economic** pressures

- Tracking and analyzing competitors to optimize pricing decisions
- Analytics can detect anomalies and predict potential areas of risk, preventing financial loss

Types of solutions and technologies

- Market Research
- Pricing (based on market data)
- Demand Generation
- Prediction and Forecasting
- Merchandising (product mix & placement)

Examples of Israeli Retail-Tech companies in Mass Moves

MARKET BEYOND

Market Beyond uses AI technology to provide online and physical retailers with real-time product-level insights and customer behavior analysis

Case study



Aim: to understand which products incurred the most loss and why during revenue leakages

\$1 Billion of revenue loss identified

10% per year of revenue loss



Anadot analyzes a retailer's business performance and alerts in real-time of potential anomalies or missed opportunities in sales in order to proactively act on them.

Case study

A 100-year old US retailer **Aim:** to acquire a AI-based solution to monitor their metrics and fasten the response time to anomalies.

+260'000 real-time metrics extracted from internal and external sources

\$1 Million of revenue loss avoided thanks to a quicker incident detection process

Other notable companies


MARKET RESEARCH

 **Revuze** Product Experience Management

 **Wizer** AI Consumer Research


PRICING & MERCHANDISING

 **QUICKLIZARD** Experience Analytics

 **MYSTOR-E** Behavioral Automated Prediction

PREDICTION & FORECASTING

 **Clicktale** Experience Analytics

 **ENDOR** Behavioral Automated Prediction

DEMAND GENERATION

 **AdScale** AI Digital Advertisement

 **albert** AI Digital Marketing
DELIVERED BY marketics



Granular Action

Granular Action

What is this solution area?

The ability to gain insights on individual customers in order to personalize products, offerings and services. For example, responsive landing pages personalized for each customer, deals tailored to personal preferences, or loyalty programs fit specifically to an individual's needs.

Why were these solutions built?

Retailers and CPGs are expected to meet customers' demand for personalization across every aspect of their shopping journey. Customer data and analytics are necessary to tailor products, marketing, merchandising and service to each individual

How do these solutions address retailers' challenges?

01 || Demand for **personalized** experience

- Taking action on the individual level directly addresses consumers demand for personalization

02 || Fragmented **consumer attention**

- By offering consumers what they want when they want it, retailers can become the favored channel and stand out in the crowd
- Individually tailored loyalty programs can keep customers coming back to one channel in a crowded, fragmented market

Types of solutions and technologies

- Tailored ad campaigns
- Personalized user experience (online and in store)
- Loyalty and CRM

Examples of Israeli Retail-Tech companies in Granular Action



Optimove uses AI technology to help retailers create an emotional relationship with the customer

Case study

ADORE ME

Aim: To 'super-personalize' customer messaging by automatically sending daily emails to distinct customer personas

22%

increase in average order amount

2.3x

growth in the number of active customers

15%

increase in campaign generated revenue



CiValue uses data-driven analytics and algorithms to transform customer insights into actionable targeted marketing strategies

Case study



Aim: To improve and digitize the customers CRM strategy, which included increasing the customized offers on the mobile app

50%

less customer attrition from customers who redeemed offers

4x

more redemption of personalized coupons than random coupons

Other notable companies

PERSONALIZATION

- Personalics Automated 1:1 Marketing
- preciate AI Consumer Research

LOYALTY & CRM

- weezmo Customer Analytics
- SAGARMATHA Automated Retail Marketing
- kwik Automated Product Reordering



Finders

Finders

What is this solution area?

The ability to help customers **find what they are looking** for with advanced search and enhanced browsing tools.

Why were these solutions built?

As the breadth of products available increases, customers can become overwhelmed by choice and less likely to make a purchase. The large pool of brand and product options can make it harder for customers to know where to look and what to look for.

How do these solutions address retailers' challenges?

01 || Fragmented **consumer attention**

- A narrow and targeted range of options, enables consumers to be more focused and less overwhelmed in their shopping experience
- Finding what they want quickly makes customers feel like their individual needs are met

02 || Rise of the **channel over the brand**

- By saving customers' time through advanced and optimized search tools, retailers can become the preferred channel

Types of solutions and technologies

- Advanced Search by image, voice, or text
- In-store navigation
- Product discovery optimization

Examples of Israeli Retail-Tech companies in Finders



Syte provides AI technology to innovate search engines thanks to visual search tools, automated textual tags and product recommendations

Case study

boohoo.com

Aim: To enhance the users' journey and allow a more natural way to discover and style their products

12%

higher Average Order Value

135%

higher pages per session



Oriient is an indoor navigation tool for the physical store that integrates with the retailer's mobile app

Case study

Large German retail chain

Aim: to understand customers' response to using indoor navigation systems and receiving promotions via the retailer's app

3-5%

loss in revenue avoided from unlocated products

Actionable insights

gained, sometimes going against the retailer's original hypothesis

Other notable companies

ADVANCED SEARCH



Ecommerce Search Engine



Intuitive Mobile Search

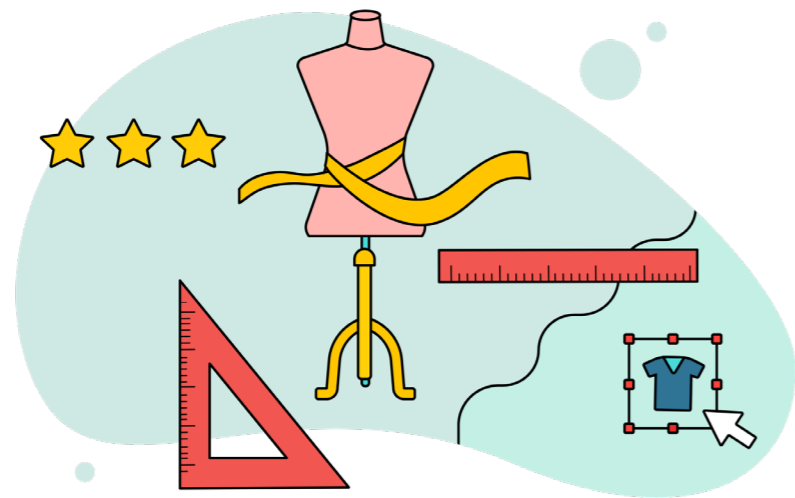
IN-STORE NAVIGATION



Indoor Positioning System



Indoor Navigation



Keepers

Keepers

What is this solution area?

The ability to remove barriers to purchase by providing the product information that customers need to make their purchase decisions.

Why were these solutions built?

Before buying a product, customers want to have access to all the information, such as how it will fit and what others thought about it.

Indeed, to convert a click into a sale or a shopper into a buyer, there needs to be consumer trust and confidence in the purchase.

How do these solutions address retailers' challenges?

01 || Demand for **personalized** experience

- Providing tools to show how a product will fit a particular individual or their home makes the shopping experience feel customized
- Selecting and showing relevant customer reviews by similar types of shoppers personalizes the purchase experience

02 || Rise of the **channel over the brand**

- Tools that give the customer a more engaging and informative shopping experience make the channel more attractive
- Opening the conversation with customers through reviews and content sharing makes them more connected to both the channel and the brand

Types of solutions and technologies

- User generated content
- Virtual sales person
- Virtual fitting room
- 3D and AR Product visualization
- On the spot promotion

Examples of Israeli Retail-Tech companies in Keepers



Sizer Technologies is an online solution with innovative fit technology that obtains accurate body measurements of its users and is then able to provide size recommendations to achieve best-fit clothing

Case study

GOLBARY

Aim: To reduce returns and increase conversions on their e-commerce website thanks to an easy tool to navigate various sizes

10%

higher higher conversion rate

25%

higher engagement rate



Yotpo is a marketing platform that leverage user-generated content (UGC) to revolutionize customer reviews, visual marketing, loyalty programs and referrals. The solution accelerates growth and maximizes customer lifetime value.

Case study

UNTUCKit

Aim: To collect UGC to make their online communication more relatable and improve their SEO ranking and on-site conversion.

20%

higher conversion rate

53%

increase in order-to-review response rate

Other notable companies

USER GENERATED CONTENT



Customized Online Content

VIRTUAL SALESPERSON



Conversational Commerce Platform

VIRTUAL FITTING & EXPERIENCE



Virtual Fitting Room

ON THE SPOT PROMOTION



Personalized Incentives



Immersive Commerce Platform



Mobile Shopping Platform



Quick & Convenient

Quick & Convenient

What is this solution area?

Remove the pain of paying with fast and flexible options at checkout online and in-store

Why were these solutions built?

Traditional checkout systems present bottlenecks, such as long waiting times, that hinder customer experience. As e-commerce becomes increasingly global and higher value items are being sold online, transaction and payment options need to adapt.

How do these solutions address retailers' challenges?

01 || Fragmented **consumer attention**

- Equipping the store with seamless digital checkout solutions provides the store with a competitive advantage for customer attraction and satisfaction
- Adapting to local currencies or allowing flexible payment options makes purchase faster and more convenient

02 || Changing **economic pressures**

- New checkout and payment systems can be more efficient, saving labor costs
- New payment systems can fight revenue loss from shoplifting and inventory mismanagement

Types of solutions and technologies

- Self Checkout
- Payments
- Financial Solutions

Examples of Israeli Retail-Tech companies in Quick & Convenient



Trigo Vision uses a camera network and AI technology to capture shopping items and completely automate the checkout process

Case study



Aim: The leading UK grocery store has partnered with Trigo Vision to introduce cashier-less stores

10%

higher conversion rate

25%

higher engagement rate



Global-e is a payment solution for online retailers that sell internationally. The platform adapts the e-commerce platform to the local currency of the customer

Case study



Aim: To facilitate cross-border e-commerce sales by presenting prices in local currencies, offering additional payment methods and offering more advantageous shipping options

77%

more international orders

Doubled

conversion rates

Other notable companies

SELF CHECKOUT



Self-scanning Checkout



Autonomous Checkout & Real-time Customer Engagement Platform

PAYMENTS & FINANCIAL SOLUTIONS



Flexible Payment Solution



Gifting and Payment Platform



Safe & Secure

Safe & Secure

What is this solution area?

Avoid risk and protect customers' privacy with secure payment tools.

Why were these solutions built?

Online payments still face security challenges from fraudsters and hackers. Some online retailers and buyers do not consider the online checkout channel equally as safe as a traditional in-store payment method.

How do these solutions address retailers' challenges?

01 || Changing **economic** pressures

- Prevention of revenue loss to fake payments
- Protection against website and ad hijacking, avoiding loss of sales to competitors

02 || **Competition** breaking traditional boundaries

- As doing business online becomes as secure as offline commerce, a new scope of digital businesses become sustainable alternatives to traditional businesses.

Types of solutions and technologies

- Anti-fraud & hacking
- Behavioral biometric technology

Examples of Israeli Retail-Tech companies in Safe & Secure

riskified

Riskified provides online retailers with an AI-based fraud prevention solution and guarantees retailers full reimbursement against wrongfully approved purchases.

Case study

FINISH LINE **Aim:** to reduce false decline rates and have an automated fraud review process

4%

approval rate lift

70%

decrease in chargebacks

NAMOGOO

Namogoo protects the online retail store from unauthorized ads and invasive promotions from competitors, allowing retailers to win back stolen online revenue

Case study

asics **Aim:** to stop the various forms of injected ads infecting ASICS web sessions

5%

decreased checkout abandonment rate

14%

increased average conversion rate for users at risk of unauthorized ads

Other notable companies

ANTI-FRAUD

FORTER AI Fraud Prevention

BIOCATCH Behavioral Biometrics for Cybersecurity

SECURETOUCH Behavioral Based Fraud Prevention



Warehouse & Wheels

Warehouse & Wheels

What is this solution area?

The ability to pick, pack and track products with more efficiency and transparency.

Why were these solutions built?

There is a growing global demand for more speed and transparency in the supply chain. Traditional warehouses do not adapt quickly enough to variations in demand and supply

How do these solutions address retailers' challenges?

01 || Pace of developing products and services

- Improving communication between the different parts of the supply chain makes fulfillment and deliveries seamless and quicker
- Smart warehouses are more flexible and can react in real-time to changes in quantities

02 || Changing economic pressures

- New delivery applications allow retailers to save on shipping costs
- Providing customers with record-breaking delivery times for online orders can become a significant competitive advantage for a retailer, leading to increase in revenue
- Transparency in the supply chain prevents loss of revenue from product mismanagement

Types of solutions and technologies

- Warehouse automation
- Delivery platforms
- Shipment transparency and tracking

Examples of Israeli Retail-Tech companies in Warehouse & Wheels



Bringg is a delivery logistics platform that provides real-time insights to optimize delivery management. The full delivery journey is streamlined across flexible internal and external fleet configurations

Case study



Aim: To efficiently and quickly deliver products in all the retail outlets of Ho Chin Minh City, Vietnam

3 hours

delivery time vs 3-5 days previously

91%

increase in recurring orders



Commonsense Robotics uses AI and robotics technology to transform supply-chain through automated, compact, and efficient warehouses and fulfillment centers, allowing retailers to deliver online orders within one hour

Case study

US online grocery store

Aim to implement a faster, cheaper and more scalable delivery solution for a grocery store in New York City, USA

15%

decrease in retailer's operational costs

10%

faster deployment of goods



Freightos is an online marketplace for international shipping. The software provides a comparison platform for delivery options

Case study



Aim: to reduce the global logistics budget thanks to improved logistics procurement and better visibility into existing global supply chain

10%

reduction in manpower hours for global freight procurements

5%

reduction in freight quoting inaccuracies

Other notable companies

WAREHOUSE AUTOMATION



Robotized Warehouse



Robotized Warehouse

SHIPPING TRANSPARENCY



Cross-border Shipping

DELIVERY PLATFORM



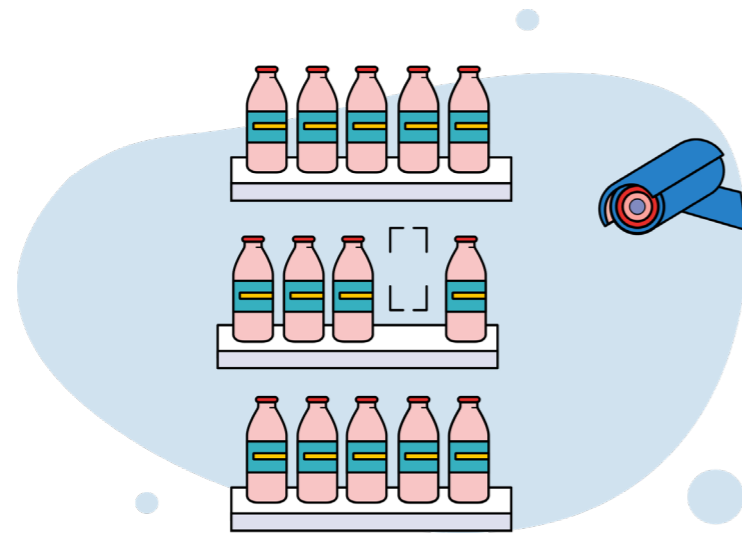
On-demand Delivery



Last mile logistic optimization



Smart Shipping Containers



In-Store Operation

In-store Operations

What is this solution area?

The ability to optimize inventory management, restocking and merchandising to limit waste, **save employee time** and keep best sellers on the floor.

Why were these solutions built?

Retailers suffer from margin and profit loss due to product and inventory mismanagement
Certain processes use costly employee time inefficiently

How do these solutions address retailers' challenges?

01 || Pace of developing products and services

- Inventory monitoring tools allow retailers to monitor the physical store with better precision and guarantee a smooth pace of operations

02 || Changing **economic** pressures

- Monitoring real-time product and inventory supply-levels and automating logistics saves significant labor costs
- Smart shelves and tracking customer traffic optimizes merchandising to enhances sales

Types of solutions and technologies

- Inventory Management
- Tracking customer traffic
- Visual recognition
- Smart shelves

Examples of Israeli Retail-Tech companies in In-Store Optimization



Trax provides a visual recognition tool to monitor and manage product inventory on shelves. Retailers receive analyses of all store operations and category management.

Case study



Aim: to decrease the labor time and costs incurred from manually managing the 900+ SKUs across various stores

2.1%

increase in sales

4.3%

reduction in Out Of Stock items



CB4 uses AI technology on pre-existing POS data to provide retailers with prescriptive analytics and avoid operational and inventory mismanagement

Case study



Aim: To implement an operations and customer experience monitoring solution with low labor cost

1.6%

expected same-store growth

14%

increased average conversion rate for users at risk of unauthorized ads

Other notable companies

INVENTORY MANAGEMENT



Transforms retail shelves into IoT



Digital Weighing Technology



Digital Product Tags

TRACK CUSTOMER TRAFFIC



3D Imaging Sensor



Managing the in-store customer journey



Foot Traffic Insights

The New Retail-Tech Landscape

GRANULAR ACTION

PERSONALIZATION



LOYALTY & CRM



MASS MOVES

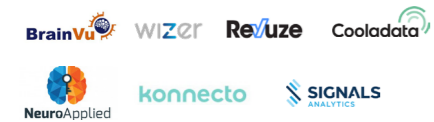
PREDICTION USING INTERNAL DATA



PRICING & COMPETITIVE



MARKET ANALYSIS



ADVERTISING AUTOMATION & TARGETING



SAFE & SECURE

SAFE & SECURE

ANTI-FRAUD



KEEPERS

VIRTUAL FITTING & EXPERIENCE



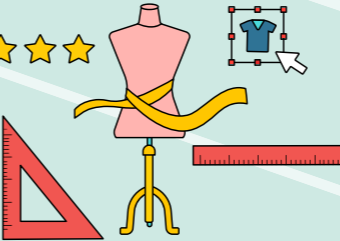
UGC



ON THE SPOT PROMOTION



KEEPERS



FINDERS

ADVANCED SEARCH



IN-STORE NAVIGATION



WAREHOUSE & WHEELS

WAREHOUSE AUTOMATION



DELIVERY PLATFORM



SHIPPING



WAREHOUSE & WHEELS



CHECKOUT & PAYMENT

SELF CHECKOUT



PAYMENTS & FINANCIAL SOLUTIONS



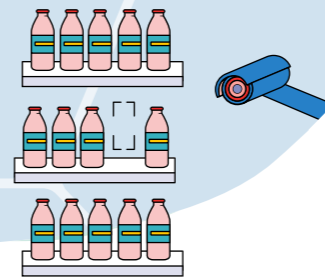
IN-STORE OPERATION

IN-STORE OPERATION

INVENTORY MANAGEMENT & MERCHANDISING



TRACK CUSTOMER TRAFFIC



Journey to Collaboration

There is no doubt that this is just the beginning of the disruption that is hitting retail. Technologies will continue to improve and consumer habits will continue to adapt. Some retailers will lead this transformation and some will be pushed forward or fall back. To be a leader: This is the time to test and transform

There are challenges on the road to collaboration – challenges that can be solved

	ESTABLISHED RETAILERS	STARTUPS	DELOITTE
IDENTIFYING THE RIGHT ONE	There are so many startups, who's right for me?	Who can benefit the most from my tech solution?	We evaluate and curate startups that fit our clients needs, and help startups define their ideal clients
ALIGNING THE MISSION	It's hard to communicate my business needs to tech people	The retailers don't speak our language, it's hard to explain the options	Working with both sides regularly, we become translators aligning goals and expectations
DESIGNING THE PILOT	How do I adopt an agile approach? How do I integrate multiple solutions?	What are the right milestones and KPIs?	With our bank of methodologies and resources we can design and monitor a pilot
LAUNCH & SCALE	Can the startup serve my global scale? How do I communicate this change to my global team?	Can my start up scale enough?	Our global network years of experience support large scale global roll-outs

DELOITTE

We evaluate and curate startups that fit our clients needs, and help startups define their ideal clients. Working with both sides regularly, we become translators aligning goals and expectations. With our bank of methodologies and resources we can design and monitor a pilot. Our global network years of experience support large scale global roll-outs

Nielsen Innovate

Nielsen Innovate is our partner in helping early stage startups become successful global companies by providing mentoring, strategic guidance, operational support and introductions to potential follow on investments, as well as connection and access to Nielsen and its global Fortune 1000 clients.

Salesforce

Salesforce is our strong partner in helping established startups and retailers track, monetize and engage with their customers.

Contact Us

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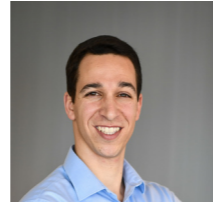
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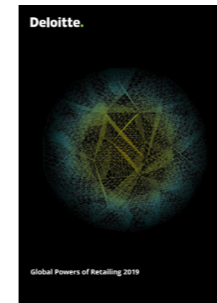


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Deloitte Thought Leadership



Global Powers of Retailing 2019



Retail 360/ Connected Store 2018



2019 Retail Industry Outlook



Shop for tomorrow's workforce: Retail Productivity



Future of food

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