



INVESTMENT INSTITUTE 2020



The Jewish Federations
OF NORTH AMERICA

Exploring Coronavirus Innovation

Roadmap to Action in Israel and Around the World

Thursday, May 7, 2020
1:00 PM, EDT

Speakers

[Eugene Kandel](#)

Start Up Nation Central



[Suzanne Barton Grant](#)

Chair, Delaware Retirement
System Board of Trustees;
Chair, Investment Committee,
Jewish Federation of
Delaware Endowment Fund

[Alec Ellison](#)

Our Crowd



[Glenn Yago](#)

Milken Innovation Center-
Jerusalem Institute

Questions to be addressed?

- What happened?
- Where are we now?
- How do we transition from disaster relief to recovery without precipitating an unprecedented global economic crash?
- Pandemic and related systemic risks--what do we know and when do we need to know it?
- How did we get here? Can we keep this from happening again? What will change?
- Where are we going? New technologies and tools? How do we finance them?
- What did we learn and what must be done? How can we co-innovate and co-invest together?
- Other questions and plans ahead?



COVID 19: Taking on Pandemics

From Disaster Relief to Recovery

Return to the Roaring Twenties?

Prof. Glenn Yago

Webinar

May 7, 2020

HOW DO WE WORK?

FINANCIAL INNOVATIONS LAB

Primary tool to generate new financial models to solve Israeli and global business and public policy development challenges. Bringing together researchers, policymakers, business leaders, and financiers to create market-based solutions



Research



Analyze



Convene



Design

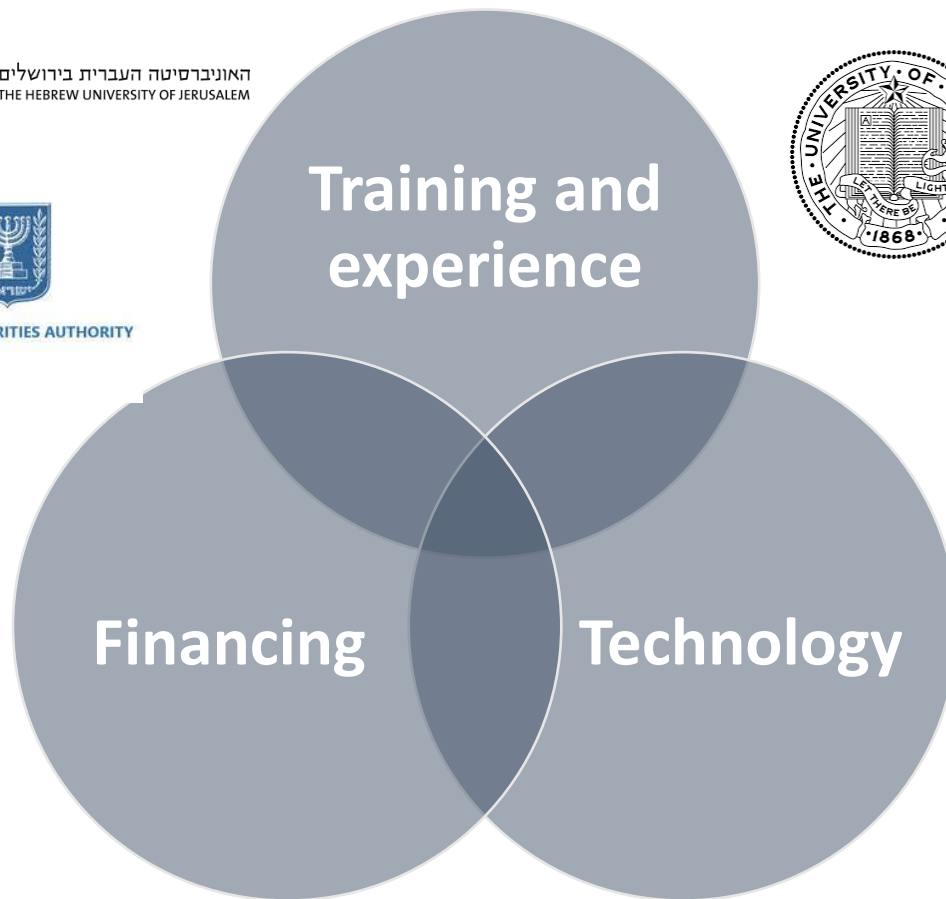
ISRAELI AND GLOBAL FELLOWS PROGRAMS

We train and deploy the best and brightest young professionals from Israel and the world to create innovative financial and economic solutions for the public and private sectors



Build Co-Innovation Teams---Work Process—Build Project Pipeline





GIGAWATT GLOBAL



Financing

Technology



Mitchell and
Jolene Julis
Foundation



Capital formation

Impact investment

Regional Innovation Partnership

Global Innovation Partnership

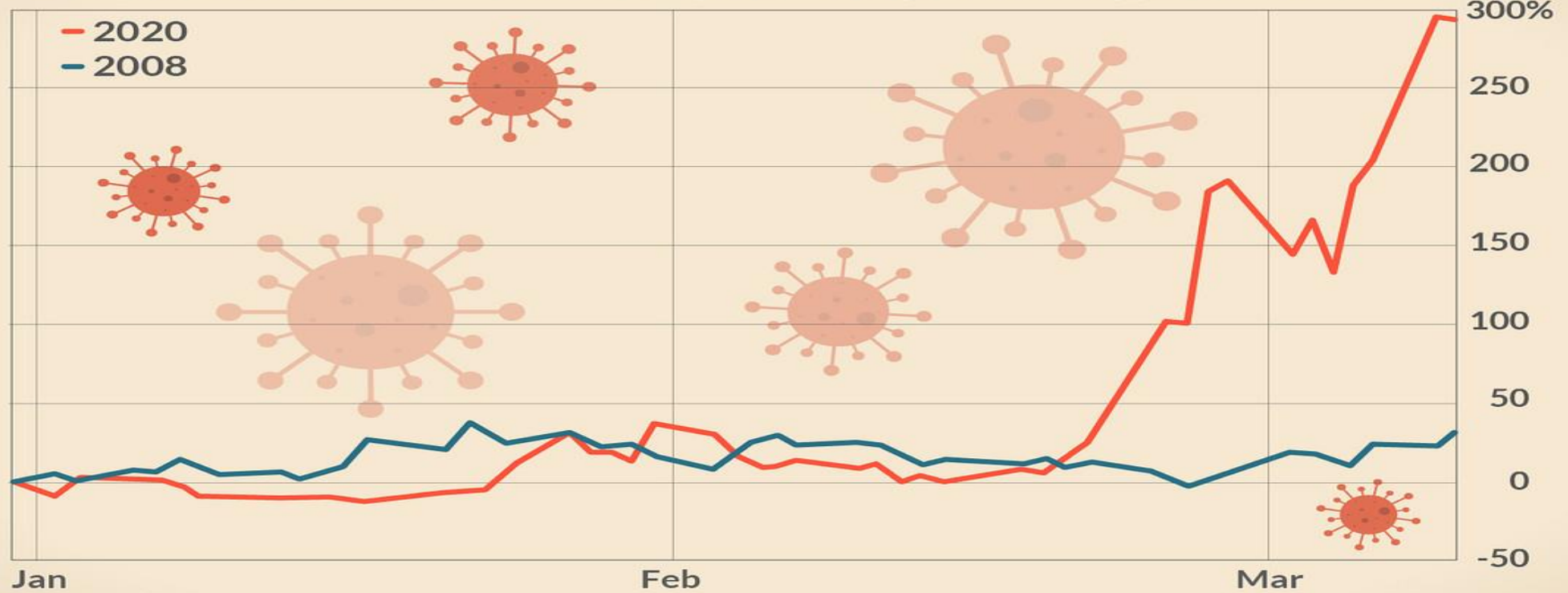
Sustainable future projects

- | | | | | |
|--|---|--|---|---|
| <ul style="list-style-type: none"> • Designing Israel's Sovereign Wealth Fund • Capital for small business financing • Heritage Asset District Financing • Solid waste treatment • Biodiversity financing | <ul style="list-style-type: none"> • Creating Israel's Social capital market • Designing affordable housing solutions • Creating sustainable financial inclusion | <ul style="list-style-type: none"> • California Israel Global Innovation Partnership • Accelerating biomedical solutions • Water solutions • Agritech to market • Sustainable energy solutions • Co-innovation teams • Urban and regional development financing | <ul style="list-style-type: none"> • Accelerating biomedical solutions • Water solutions • Agritech to market • Sustainable energy solutions • Energy efficient buildings • Accelerating the adoption of Green building | <ul style="list-style-type: none"> • Global Fellows • Israeli DFI design • Project development in developing economies • Healthy small business financing • Bond banks for public health |
|--|---|--|---|---|

What Happened? Uncertainty vs. Risk: Covid 19 and Fear Pandemic— Flattening Curves as Fat Tail Risks Increase

VIX 2008 has nothing on VIX 2020

Gains for Wall Street's fear index this year have by far outstripped the financial crisis



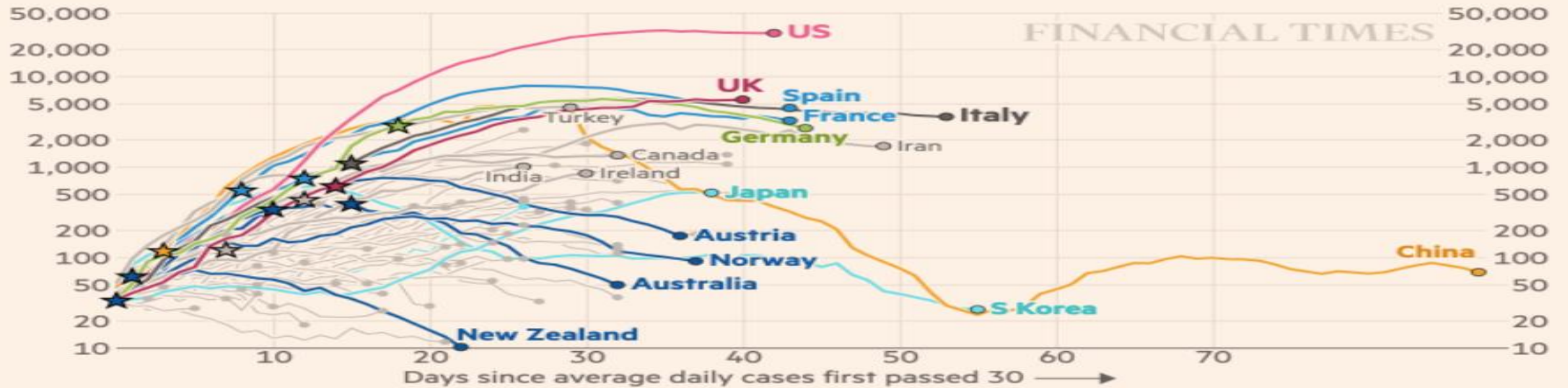
Source: Dow Jones Market Data

Where are we now? Treading water?

Other countries have managed to get $R(0)$ well below 1

Several countries have turned the corner, with numbers of new cases now in decline

Daily confirmed cases (7-day rolling avg.), by number of days since 30 daily cases first recorded
Stars represent national lockdowns ★



FT graphic: John Burn-Murdoch / @jburnmurdoch

Source: FT analysis of European Centre for Disease Prevention and Control; FT research. Data updated April 17, 19:24 BST
© FT

How to keep Pandemic lockdown from precipitating economic crash?*

Treating COVID 19 Shocks

- Negative Supply Shock (sudden decrease in supply of commodities and services)
- Strong Distribution shock (changes in aggregate demand)
- Demand Shock-how to offset?
- Credit chain and bankruptcy shocks

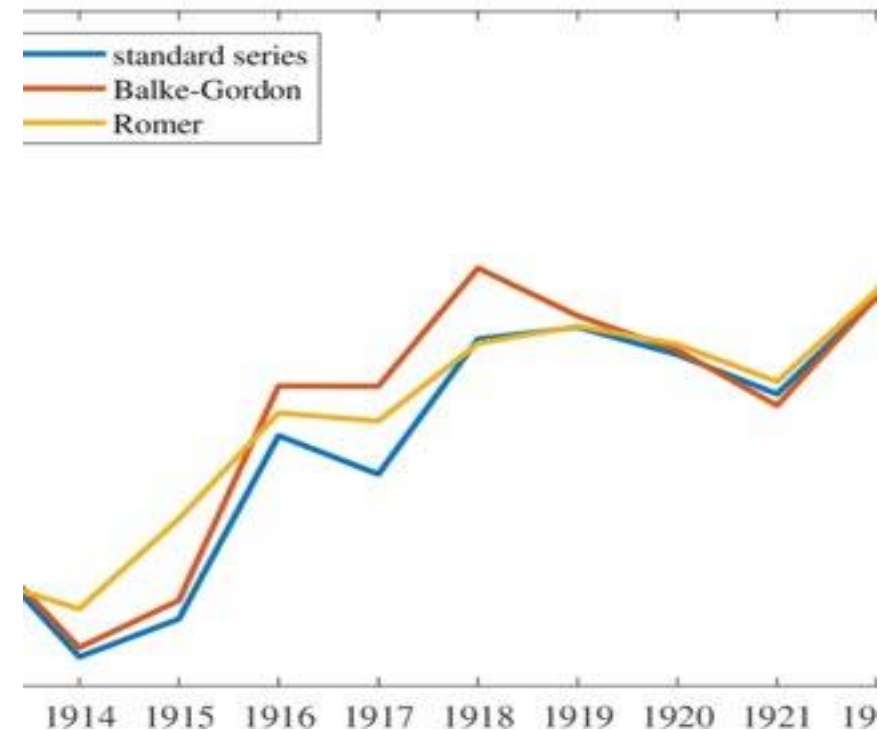
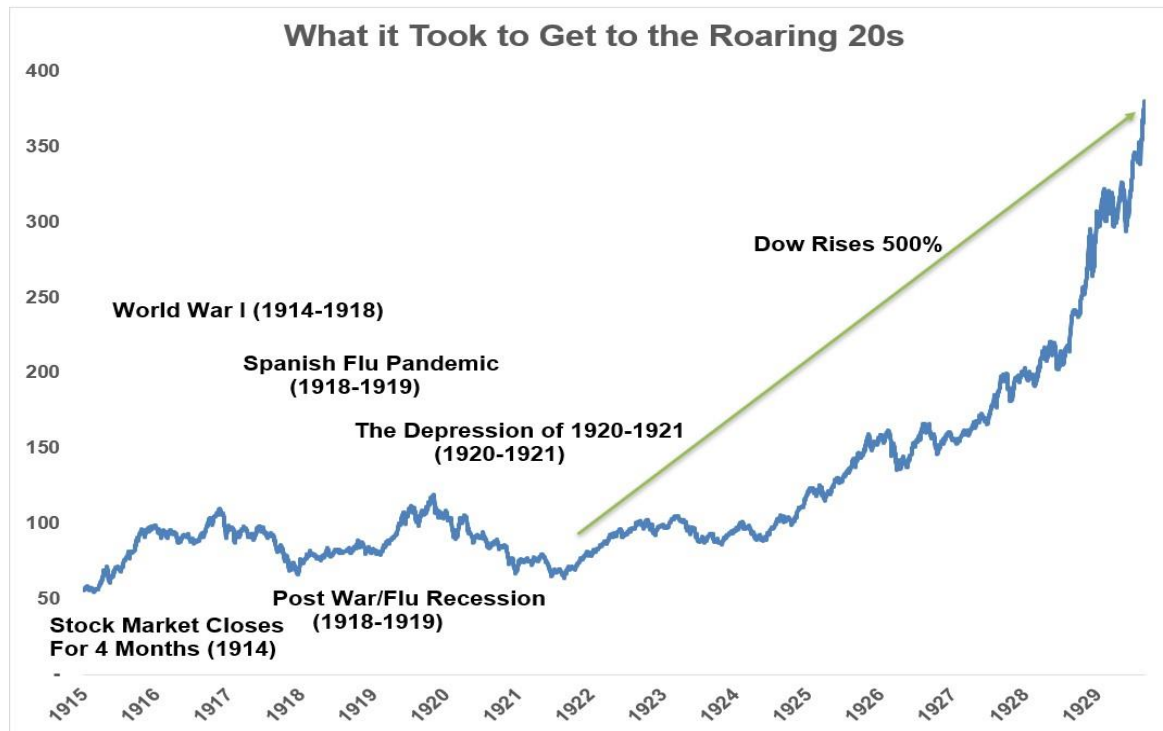
*Hint from History:

Avoid Herd Behavior of Witch Trials and Bank Runs

- Source: DeLong, 2020/ Yago and Zecher, 2020



Back to the Future?: Spanish Flu— “exceptional brevity and moderate amplitude”*of recovery through innovation

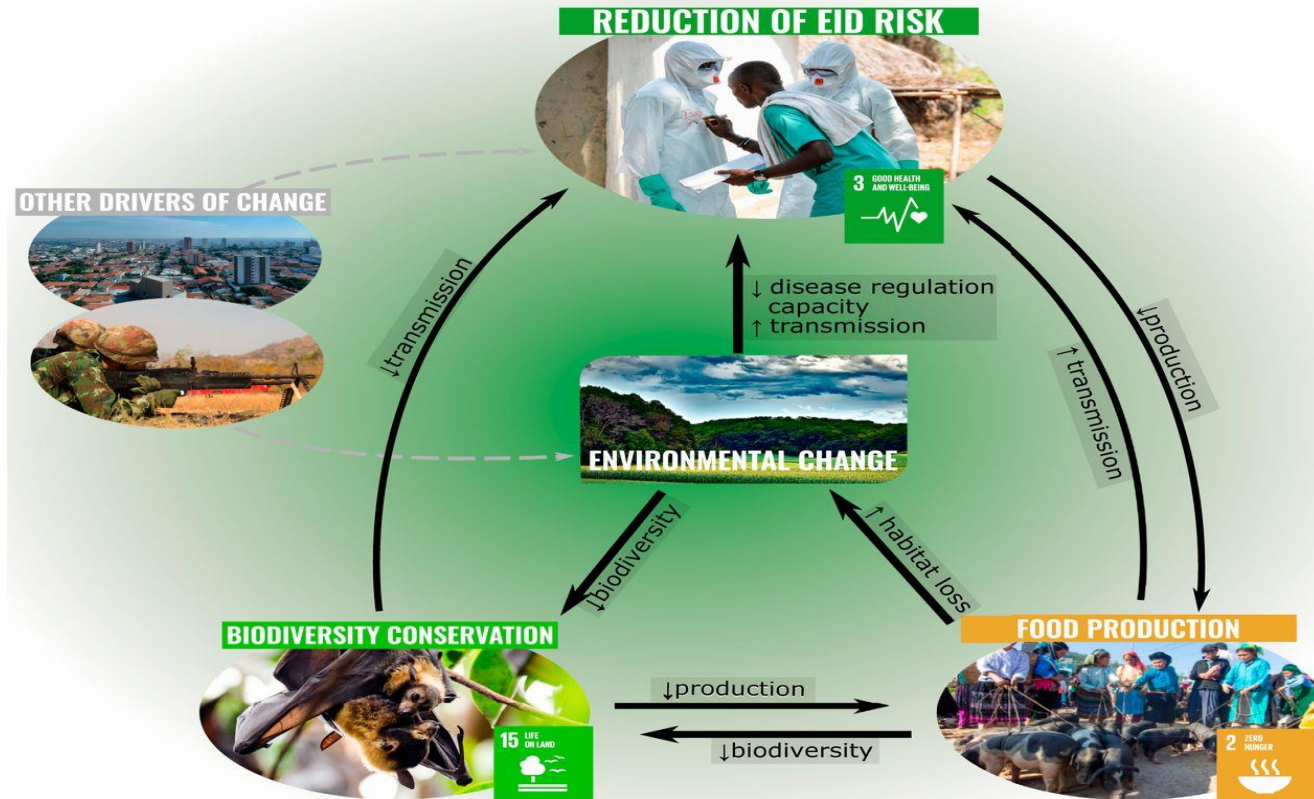


Source: Allen, 2010; Barry, 2005 Source: Velde, Federal Reserve of Chicago, 2020; *Burns and Mitchell, 1946. 1946



How did we get here?

Overcoming Pandemic Hindsight: Arresting Contagion from Emerging Infectious Diseases



Risk of emerging infectious diseases (EIDs) is a key component of sustainable development planning. UN Sustainable Development Goals 2, 3, and 15 are linked through the shared influence of environmental change. These interactions increase (↑) or decrease (↓) key elements of the systems underpinning the achievement of each goal.

Where are we going?

Framing Effect: Risk Assessment and Risk Mitigation in Financing the Future



Israel's Disaster Policy Response: Fiscal and Monetary/Financial (Macroprudential)

Fiscal

- Immediate Response: NIS 80 Billion (5.7% of GDP) (\$22 billion)
- Social Safety Net (NIS 11 billion)
- Liquidity assistance (NIS 41 billion direct and guaranteed business loans)
- Property tax and other tax relief
- Accelerated tax refunds
- Infrastructure, including IT support for SMEs and governments
- Grants for vulnerable populations

Pandemic Crisis QE

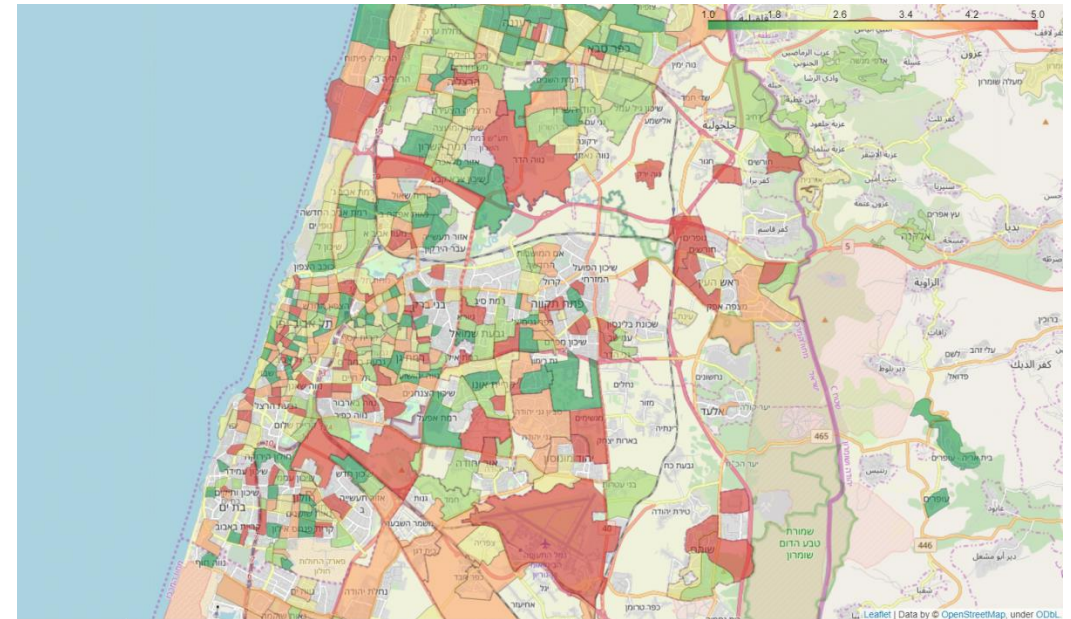
- NIS 50 billion government bond purchases
- Repo operations for shekel liquidity to banks
- Policy rate cut 15bp to 0.1 percent
- Expanded term funding for SMEs credits
- Extended LTV value-cap from 50-70%
- Easement of debt payment to income ratio for mortgage loans to pre-crisis income
- Suspended restrictions to accounts due to insufficient funds

Israel Century Bonds: Matching Long-tail Risks with Long-term Financing---Record \$5 billion sovereign issuance

- 4.5 % coupon for 100 year, 3.875% for 30 year, 2.25% for 10-year
- Demand topped \$25 billion
- 400 investors from 40 countries

Big Data, AI, Machine Learning: From Iron Dome to Health Shield (Hamagen)

- Staying two steps ahead
- Detection, Testing, Tracing
- Identifying bottlenecks-streamlining
- Enabling continuous innovation



Gush Dan Neighborhoods: Average COVID-19 associated symptoms region map. City municipal regions with at least 30 responders and neighborhoods with at least 10 responders are shown. Each region is colored by a category defined by the average symptoms ratio, calculated by averaging the reported symptoms rate by responders in that city or neighborhood. Green - low symptoms rate, red - high symptoms rate. (Source: Weizmann Institute and Clalit)

Manshema Ventilators: Sprint COVID 19 Hackathon

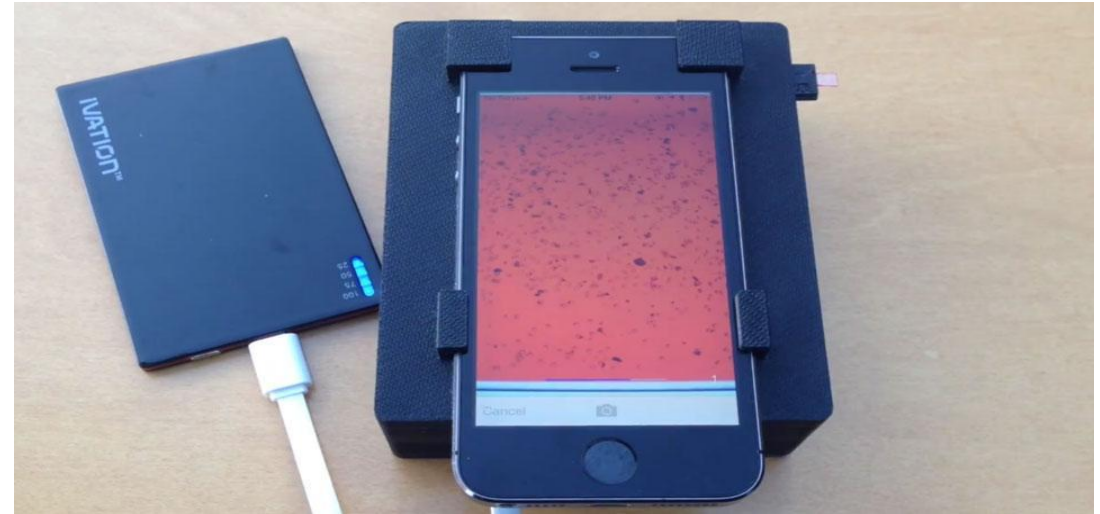
- Low-cost, open source ventilator: Reduced cost from \$6000-\$200 in 6 weeks
- Hackathon: Sprint Covid-10
- Tech-Medical-Military:
- Team: Assuta-Ashdod Hospital-Rafael AdvancedTech
IDF-Weizmann Institute/TAU



Where are we going? Tele-Everything

Arresting Pandemic Contagions --End-to-End Global Health Solutions: Test, Trace, Treat, Repeat. . .

- Tracking the infection and preventing its spread—Point-of-care Diagnostics
- Important knowledge:
 - How it's spreading
 - Who it's targeting
 - Risk for different populations
- Developing **disruptive** technologies and therapies and assessing interventions—evidence based translational medical innovation



What are our Hopes and Dreams?

How do we keep this from happening again?

Disruptive Tech to Democratize Global Health: Building Launchpads through Co-Innovation Teams: Telemedicine and Point-of-Care-Digital Medical Services

- Linking Detection, Diagnostics, Treatments, Vaccines
- Mobile phone-based device for viral RNA detection-Digital Medical Protocols for treatment-Accelerate new anti-viral treatments and vaccines
- Fast Results
- Portable
 - No additional equipment requirements
 - No need for amplification
 - Enable testing outside clinical laboratories: airports, schools, homes---Mobilize and deploy.
- Easy to use – minimal to no training required
- Adaptable to new viral variant or strain as new pandemics evolve
- Adaptation to conventional healthcare
- Data processing on phone to track and report infections
- Adaptive project development and innovative finance teams and resources— Faster Mind to Market

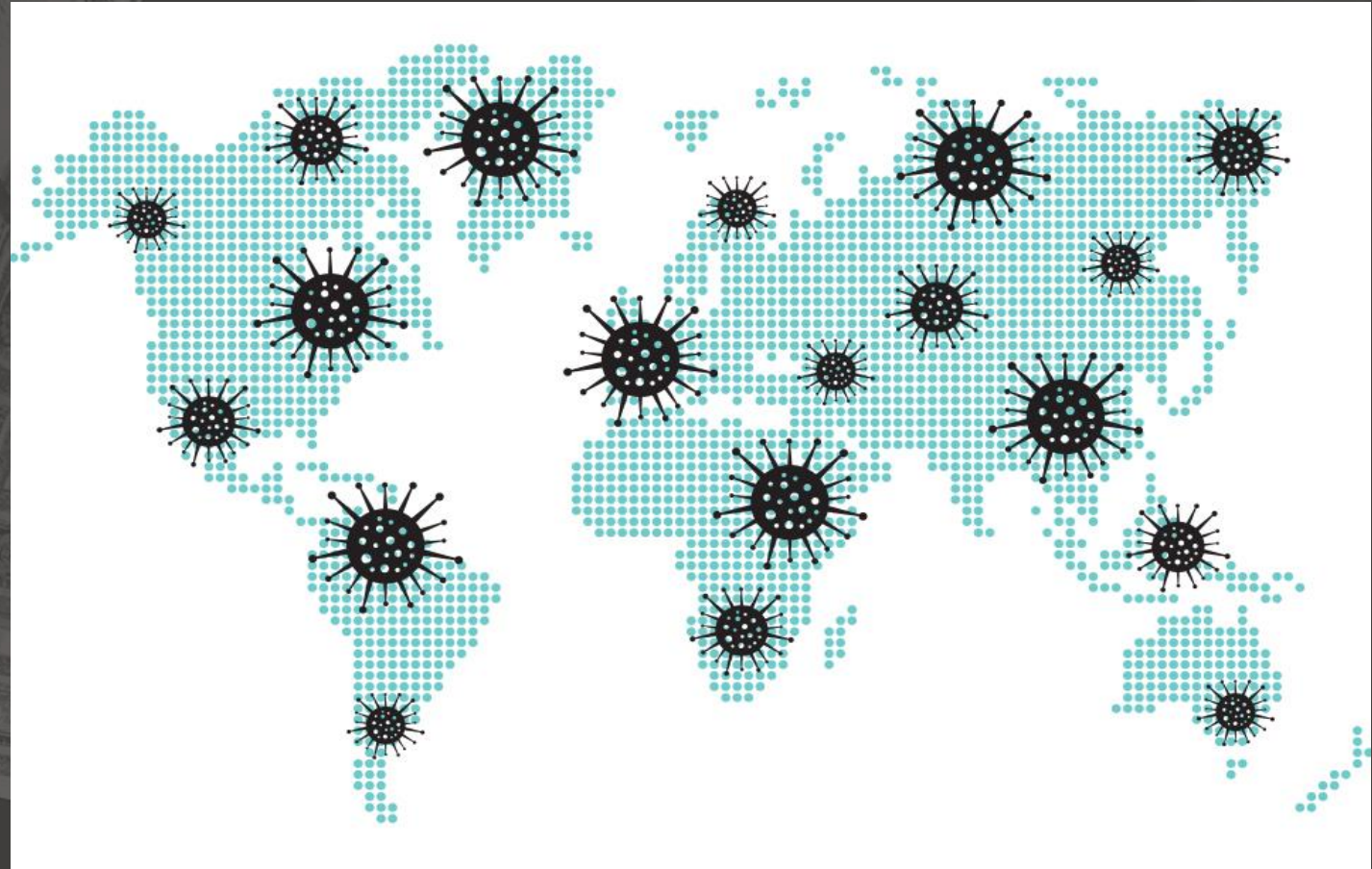
Are there any questions?

- Certificates of Immunity---disease virus test/ presence-of-antibodies test
- How quickly can we match the immune with public-contact jobs?
- What jobs can involve minimal infection risk?
- What minimal-infection substitutes can we find from previous jobs with greater infection risk?
- How can this change supply chains positively?
- How quickly can restrictions be relaxed without this or other viruses roaring back?
- How to avoid market receiving “shutdown” signal to enterprises we want restarted?
- How fast can we create launchpad for detection, diagnostics, treatment and vaccine?
- How do we keep this from happening again?

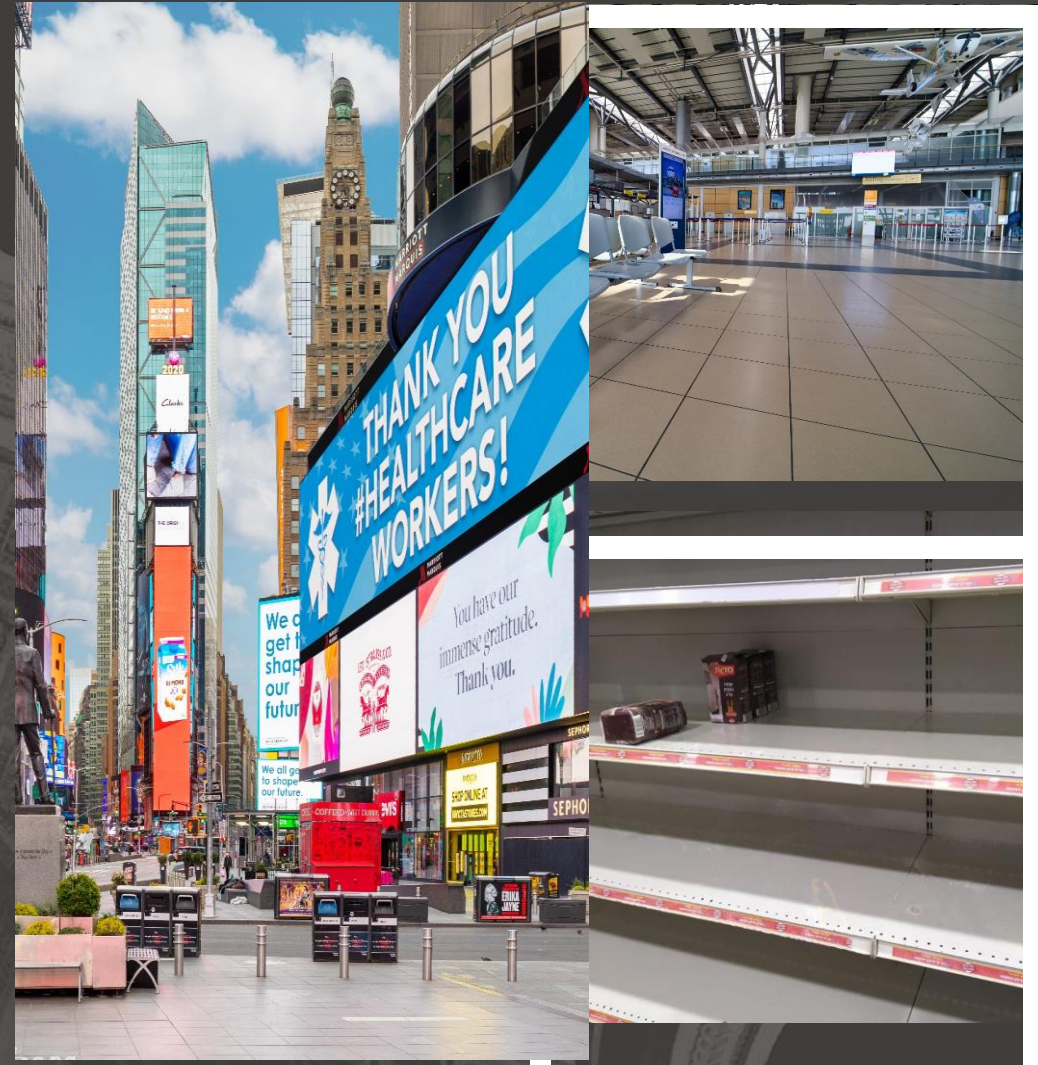
*START-UP
NATION
CENTRAL*

Tech vs. COVID-19: Israel's Investment Roadmap for Global Recovery

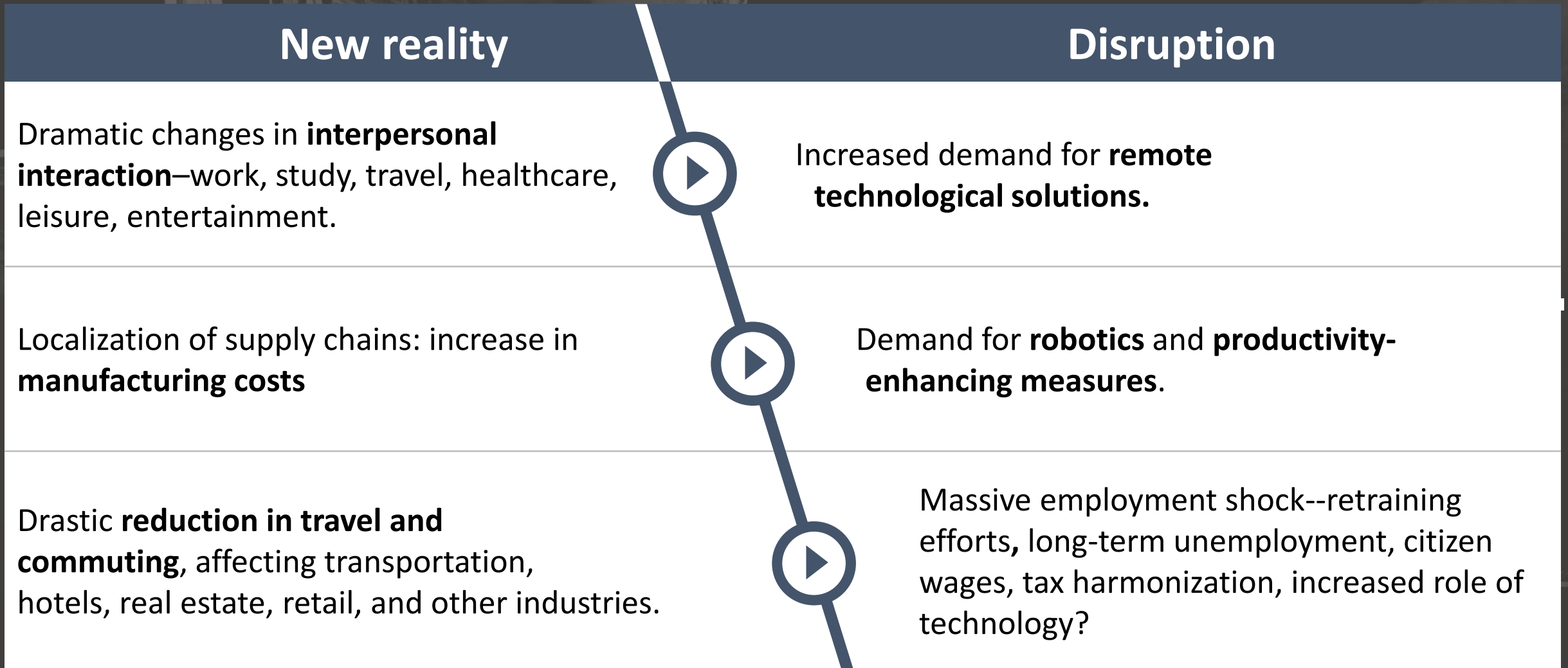
Prof. Eugene Kandel, CEO



- **Prolonged disruptions** – maybe two rounds in 2020-21: may cause economic challenges and social unrest.
- **Supply shock** followed by a demand adjustment.
- **Monetary/fiscal policy limitations.**
- Governments will become more central and powerful.
- More polarized world; protectionism and localization of supply chains.
- Investor focus on local markets and firms.



“The Day After” – Tech trends acceleration



- **25% unemployment** - starting to decrease.
- **Economic and financial** position of the country, prior to the crisis, was sound - 61% debt.
- **Significant** government relief package – yet **much smaller** than in other developed countries.
- **Frustration** of citizens as difficulties mount; expecting a much larger bailout.
- **Self-employed** are the hardest hit in the Israeli safety net structure.



- **\$8.5 Bln. investments in 2019, over 85% from foreign funds, expected to be gone for ~ 1 year, creating liquidity crunch.**
- **20-100% loss of revenues in Q2.**
- Local investors are **culling portfolio companies** and forcing **cost-cutting** on the rest; **layoffs**.
- **Many good companies with short runways** cannot survive without assistance. Serious **long-term threat** to the industry.
- Helping the tech sector is not politically popular, but the government is acting quickly and creatively.



“The Day After” – Israeli Tech

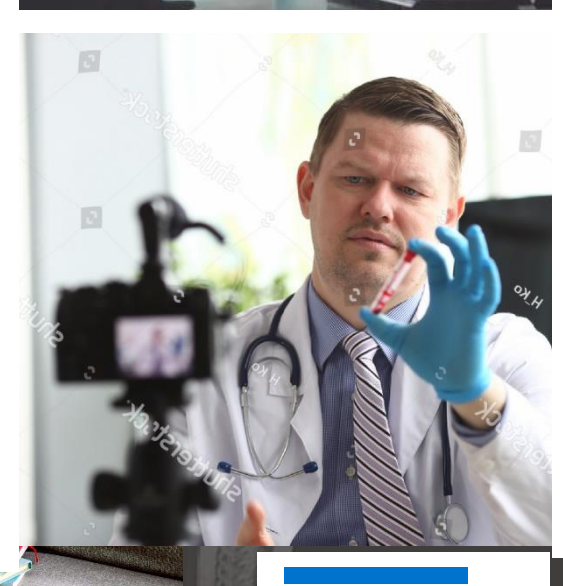
- Polarization and protectionism are not good for the Israeli export economy. We believe our largest markets, US and Europe, are safe.
- Increased demand for technology dramatically increases the value of Israeli tech companies, that can pivot very quickly: **AI, Cyber, Industry 4.0, Digital Health, Edutech, and Agritech.**
- Increased value + reduced current valuation = good entry point.
- Upcoming government downside protection makes this a one-time opportunity.



- Investing in tech today generates returns for government that are on the order of magnitude larger than for private investors.
- Co-investing **solves adverse selection**.
- Small companies:** runway-increasing grants.
- Medium-sized:** debt and equity instruments for institutional investors; new money from venture investors. Only public money is downside-protected by government.
- Large firms:** various types of debt instruments with some downside-protection.

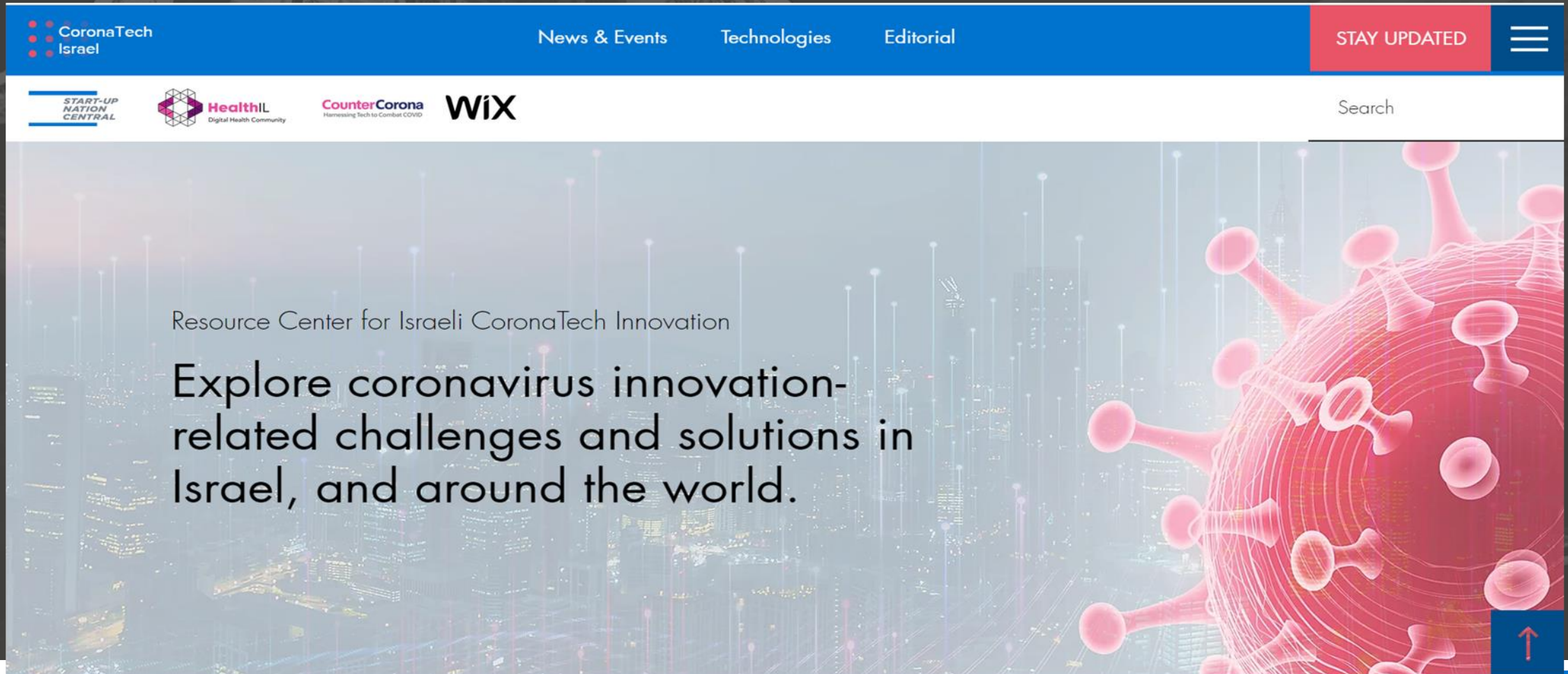


- **Many people are idle:** can use their free time to upskill or reskill.
 - Prepare college students for the job market.
 - Upskill high-tech workers
 - Change people's occupation, bring talent to tech (*Lightricks*).
- Designing technology-driven comprehensive solutions for managing epidemics.
- Double bottom line - modernizing government and assisting tech.

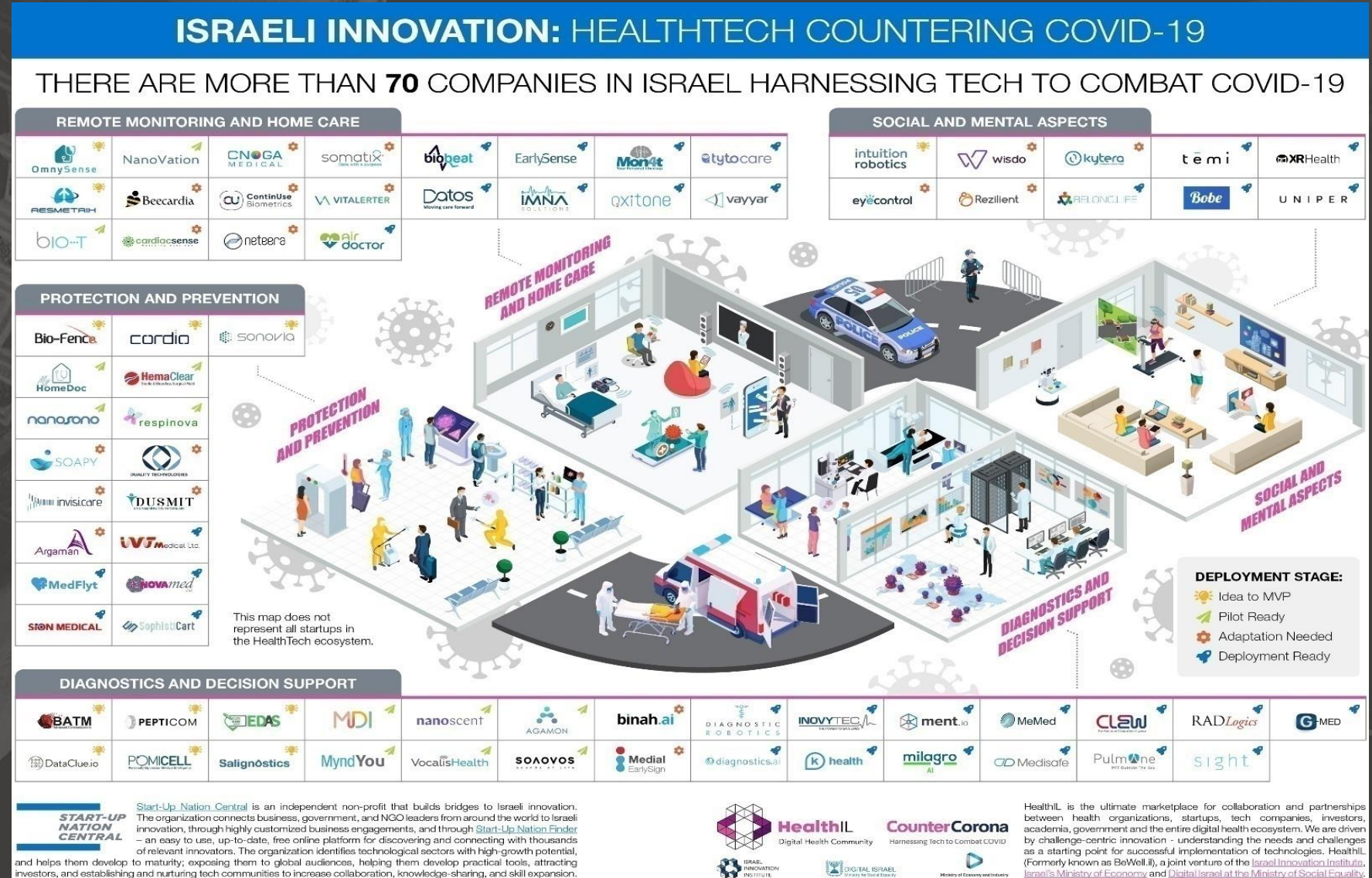


Corona Tech Website: CoronaTech.org.il

Startups, Solutions, Challenges, Opportunities, Events, Grants, Tips for Startups



- **Directory of innovative Israeli companies offering COVID-19 solutions.**



- **The Shield** mobile phone app for contagion detection.
- **Diagnostic Robotics** triage and monitoring system for healthcare providers, payers and government agencies.
- **Vocalis** voice-based detection of COVID onset.
- **PulseNMore** smallest Ultrasound in the world. Fits in your phone; ultimate tool for treating Corona patients.
- **MigVax** COVID-19 vaccine project.
- **TytoCare** remote medical exam kit and app.
- **Aqooa** water with nano electrodes as a disinfectant.
- **COVID-19 test booths** used by Israeli HMOs.
- **Intuitive Robotics** – companionship for seniors.
- **Duality** – protecting privacy even when monitored.





Start-up Nation on the COVID-19 Front Lines

Pandemics and epidemics over last 100 years



1918

"Spanish Flu" (H1N1 virus)



1968

"Hong Kong Flu" (H3N2 virus)



2003

Severe Acute Respiratory Syndrome (SARS)



2012

Middle East Respiratory Syndrome (MERS)



1957-1958

"Asian Flu" (H2N2 virus)



1981

HIV/AIDS



2009

"Swine Flu" (H1N1 virus)



2019

2019-novel Coronavirus (COVID-19)

COVID-19 Overview in Israel (05/05/20)



Israel

Coronavirus Cases:

16,246

Deaths:

235

Recovered:

10,064

ACTIVE CASES

5,947

Currently Infected Patients

5,877 (99%)
in Mild Condition

70 (1%)
Serious or Critical

CLOSED CASES

10,299

Cases which had an outcome:

10,064 (98%)
Recovered / Discharged

235 (2%)
Deaths



How does Israel really stack up?

Israel Covid-19 Rankings Relative to the 36 OECD countries (05/05/20)

Total cases

#20

16,246

Total Deaths

#12

27 Per 1M

Testing

#4

46,708 per 1M

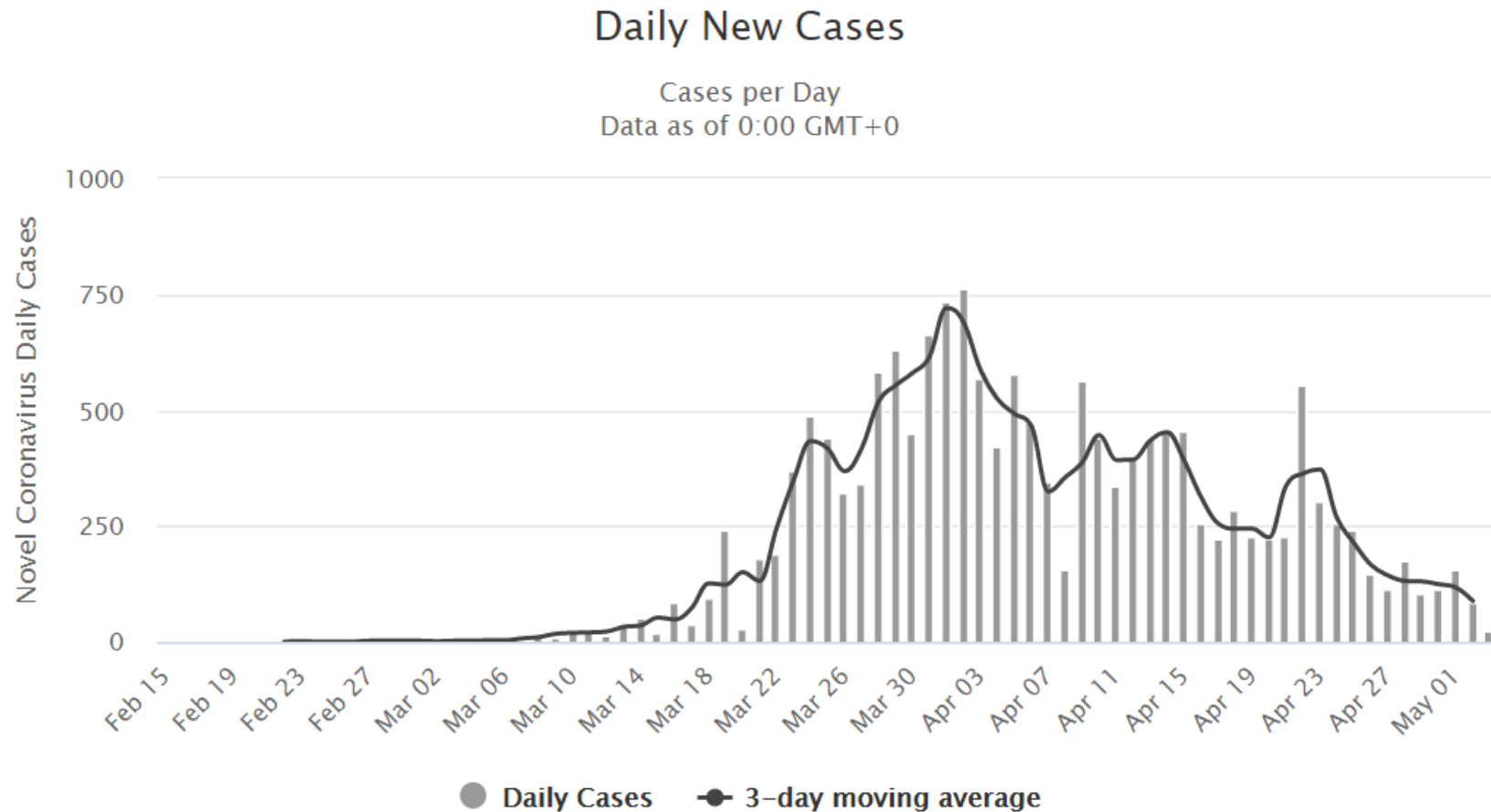
Mortality Rate

#5

1.4% of cases

Coronavirus in Israel: Infections/Day

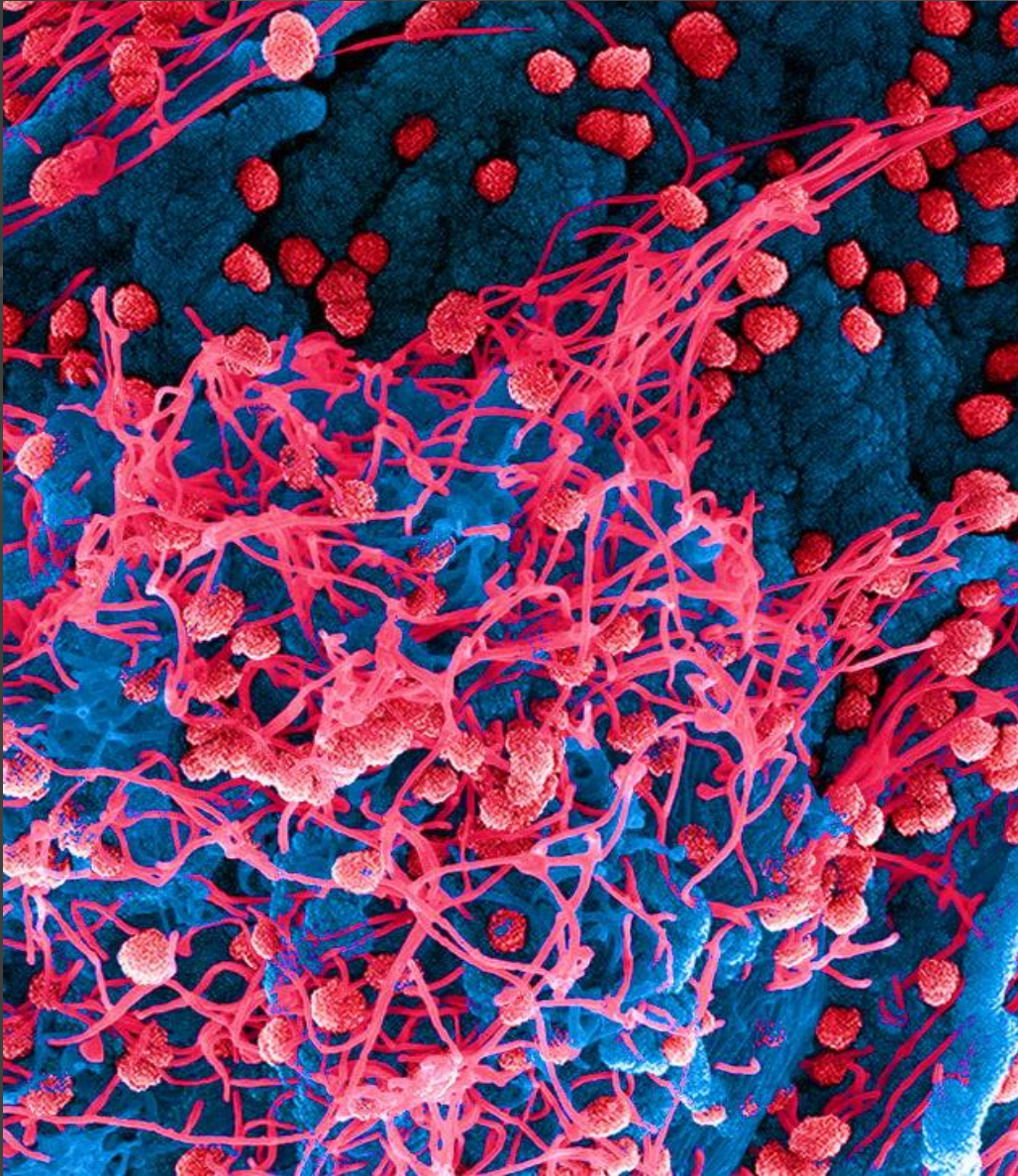
Daily New Cases in Israel



Investment opportunities and pandemics

- The **frequency of pandemics is rising** due to globalization
- The **human & economic costs rise exponentially** if not controlled
- Preventing, controlling & treating these pandemics effectively requires a **broad range of innovations** which will generate powerful returns due to the costs they mitigate
- Maintaining business and lifestyle continuity requires new, scalable, digitally-delivered **“contactless” solutions**
- The breadth of the market opportunity has the **potential to create the largest economic disruption & dislocation since WWII** Thereby creating a multi-trillion dollar global opportunity, while enhancing human health, work & lifestyle

Investment in pandemic and related themes



- COVID-19 has created an **urgent need for innovation** in global health crisis management
- The innovation imperative is **not limited to medical solutions**. Mitigating the impact will transform many market segments.
- OurCrowd, a VC leader not only in healthcare but across industries, is **uniquely positioned** to fund a range of solutions
- **OurCrowd has dozens of portfolio companies engaged in the fight** and seeking investment and engagement from the crowd

Israel thrives at tackling global challenges

World Economic
Forum:
Israel is the World's
Most Innovative
Country



#1

Growth of innovative
companies

#1

R&D expenditures

#2

Venture capital
availability

#2

Ease of finding skilled
employees

#13

Nobel prizes per capita

We will invest in new opportunities addressing a variety of sectors



Prevention & Containment

Early detection Sensors

Vaccines

Data modeling, prediction & tracking

Anti-microbials



Treatment & Healing

Diagnostics & testing

Therapeutics

Medical equipment

Isolation, robotics & personal protective equipment

Telehealth, in-home care & remote monitoring

Health record portability



Continuity & Disruption Mitigation

Communication, collaboration & remote work

Virtual, distance-based services

Business continuity

Robotic process automation (RPA)

Food security & preservation

Risk mitigation/Insurance

Distance learning

Logistics, transportation

Existing trends are accelerating due to crisis

GlobeSt.com™

How Investors Should Start Strategizing for the Future

It is important for investors to think about long-term trends when making investment decisions today.

By **Kelsi Maree Borland** | April 20, 2020 at 02:00 PM

NewStatesman

CORONAVIRUS

30 MARCH 2020

How Covid-19 will accelerate trends that were already changing our world

The pandemic has focused attention on digital retailing and the need for secure supply chains.

BY JON BUMSTEAD

Winners and Losers

The Crisis is accelerating the transition to value within digital and virtual components in every industry.



Winners

Communications and virtual services
Healthcare/medtech equipment
Hardware/software vendors to above
Industrial Automation



Losers

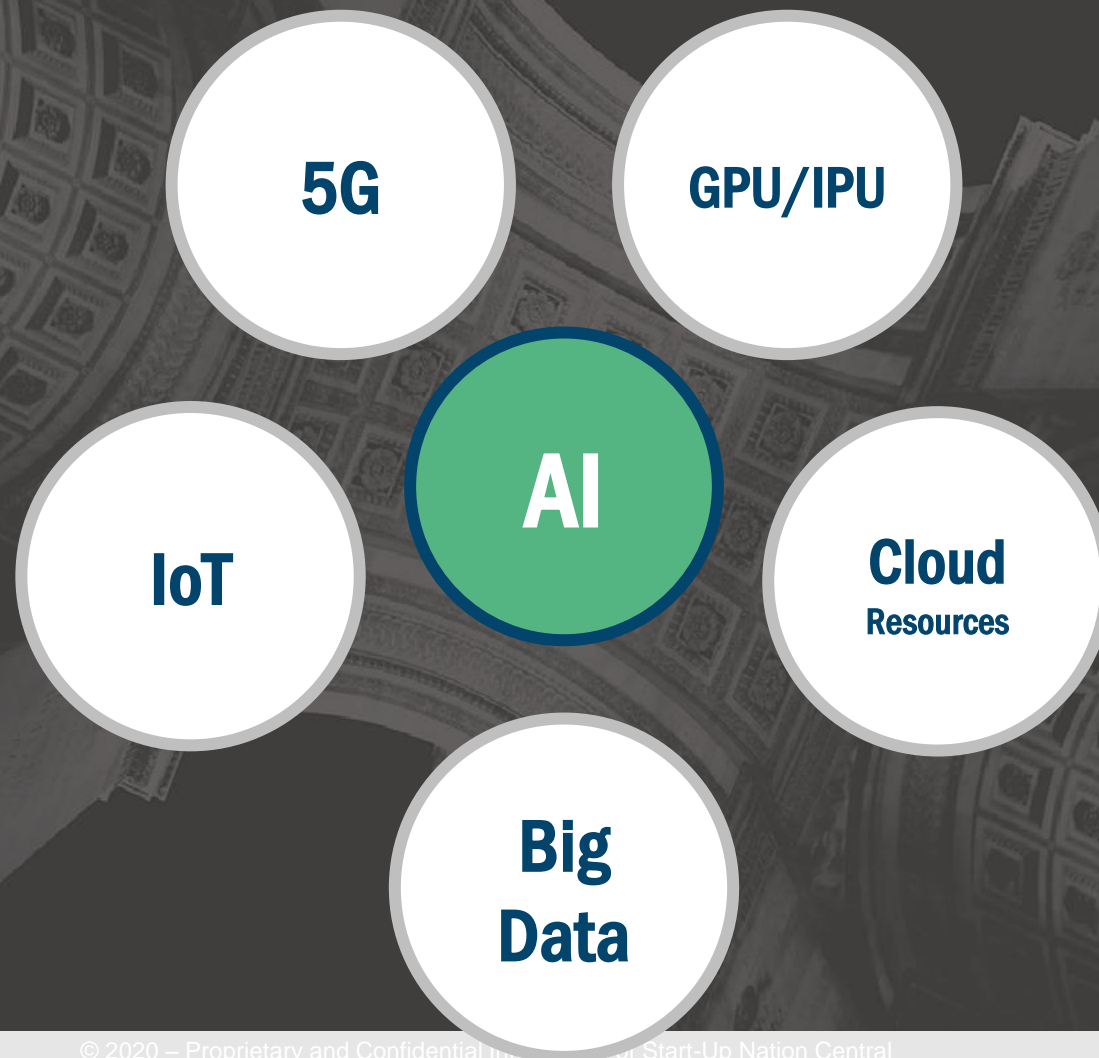
Commercial Real Estate
Oil industry



'Reformulation'

Travel & Leisure
Life, health, P&C insurance

AI is the strongest accelerant



Testing technologies in Israel

Saliva test



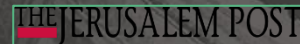
Israeli rapid COVID-19 lab diagnostic kits in production

A hospital lab kit to diagnose COVID-19 in 50 minutes is nearing the market, while a home kit will be ready within four months, says BATM founder.

By Abigail Klein Leichman | MARCH 19, 2020, 3:45 PM



Breathalyzer test



New method of testing for coronavirus in under a minute, by Israeli tech

The new method, will allow for a quick and simple diagnostic test, which can be used anywhere, from airports, to hotels.

By CELIA JEAN APRIL 19, 2020 16:29



Voice-based test



Gov't exploring voiced-based corona testing technology

Defense Ministry seeks to develop new methods to test for the coronavirus – including a voice-recognition app that might be able to facilitate home-diagnosis of initial symptoms.

by Hanan Greenwood — Published on 03-25-2020 13:47 — Last modified: 03-25-2020 13:47



New therapeutics in Israel

GLOBES

Pluristem soars as Israeli Covid-19 patients improve



THE TIMES OF ISRAEL

2 Israeli COVID-19 patients said to improve in experimental drug trial

Pair treated with Opaganib, from biopharmaceutical firm RedHill, showed progress within a few days of starting treatment, company says

By **LUKE TRESS** ▾

13 April 2020, 6:34 pm | 7



5,474
shares



Ventilator technologies in Israel

Portable ventilator

THE TIMES OF ISRAEL

IAI, Defense Ministry, Inovytec convert missile factory to produce ventilators

New production line, set up 'within days,' delivers 30 portable breathing machines to Health Ministry to address shortage amid coronavirus pandemic

By LUKE TRESS

2 April 2020, 3:53 am | 0



416 shares



Hooded ventilator

HAARETZ

Missiles Out, Ventilators In: Israeli Defense Contractors Answer the Coronavirus Call

'We're very good at war technology, and this is a war' – Defense companies are bringing their skills to medical technology and hospitals are pleased with the results

Noa Shpigel | Send me email alerts

Apr 15, 2020 7:00 AM



Low-cost open-source ventilator

THE JERUSALEM POST

Coronavirus: Israeli researchers design low-cost open-source ventilator

"AmboVent" is a device inspired by the bag-valve mask ventilators that paramedics use when they're manually ventilating patients in an ambulance.

By ROSSELLA TERCATIN | APRIL 16, 2020 15:26



Vaccine development in Israel

The Israel Institute for Biological Research and
the Weizmann Institute of Science

THE TIMES OF ISRAEL

Israel's biological institute reports 'significant progress' on virus vaccine

Head of secretive defense facility tells Netanyahu the institute will soon start testing on animals, but working vaccine still long way off

By TOI STAFF

31 March 2020, 7:13 pm | 1

f t in e 3,909
shares



MIGAL Research Institute

Newsweek

CORONAVIRUS VACCINE 'WEEKS' AWAY FROM BEING DEVELOPED, SAYS HEAD OF ISRAELI SCIENCE RESEARCH INSTITUTE

BY KASHMIRA GANDER ON 2/28/20 AT 8:42 AM EST



MigVax



Leading Coronavirus Vaccine Development Company

Leading coronavirus vaccine development company, focused on COVID-19

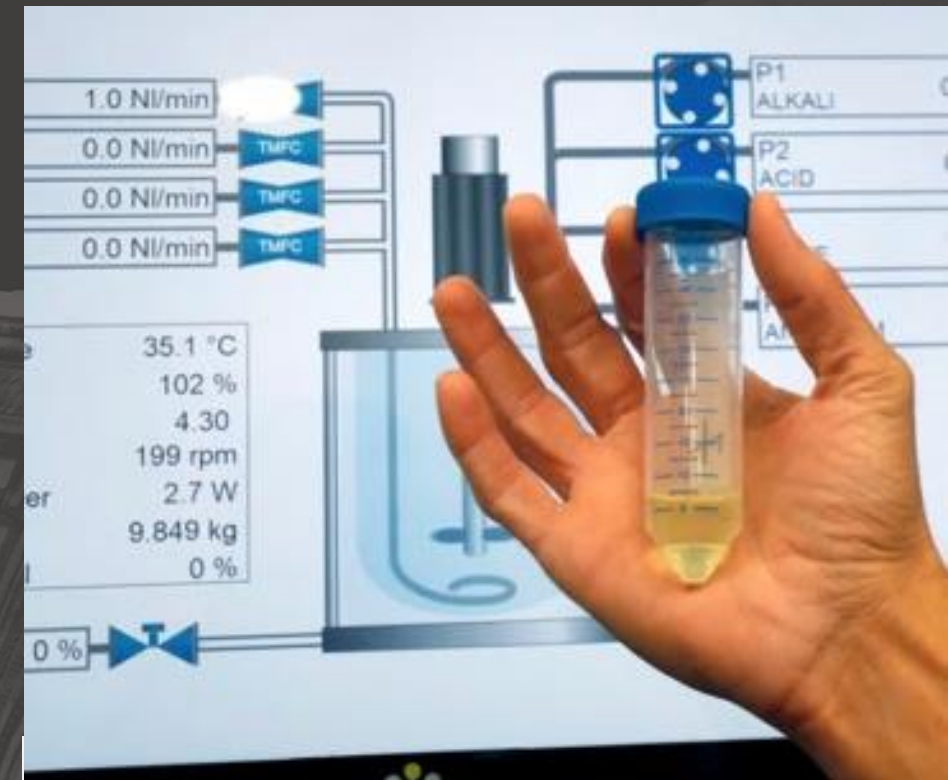
Extensive coronavirus vaccine experience. Animal trials showed promise, advancing towards human trials in the near term.
Safety advantages expected to accelerate regulatory process.

Novel oral vaccination approach induces high levels of specific antibodies and delivers the antigen into mucosal tissues.

Economic manufacturing approach should yield cost-effective scale up ... critical given the billions of doses required globally.

"We're all hoping and we believe the world is going to need **more than one vaccine** as part of the solution."

- GSK CEO Emma Walmsley



The New York Times

Israel's OurCrowd Leads \$12 Million Investment to Develop COVID-19 Vaccine

The MigVax Advantage

- The MigVax vaccine is **oral**, making it very simple to administer.
- It doesn't use any form of the virus itself – either live or dead – making it safer to develop and for **immune-compromised patients**.
- It is based on a vaccine for another strain of coronavirus in birds that has already been tested on live animals and **proved to be safe and effective**.
- It offers significant advantages in manufacturing and cost as its production is based on the well-known process of bacterial fermentation, so it can be **scaled quickly** to provide the millions of vaccine doses required to stamp out the pandemic.
- The MigVax solution is a platform. The strategy they are developing is not just specific to the current strain of COVID-19. The platform looks like it will provide an effective basis to **develop vaccines for other forms of coronavirus now and in the future**.



“Breakthrough: Israeli Scientists Say They’ll Have a Coronavirus Vaccine in Just Weeks”

Source: <https://www1.cbn.com/>

Sight

sight

Combining AI and breakthrough hardware to bring lab-quality CBC results to the doctor's office

COVID-19 Use Case:

Sight Diagnostics device is currently being used [by Sheba Hospital] to run blood tests on suspected Corona patients without the need to transport infected lab samples, thereby reducing risk of further infection



"Israeli start-up to process blood test in 10 minutes cleared by US FDA"

Source: <http://www.jpost.com/HEALTH-SCIENCE>

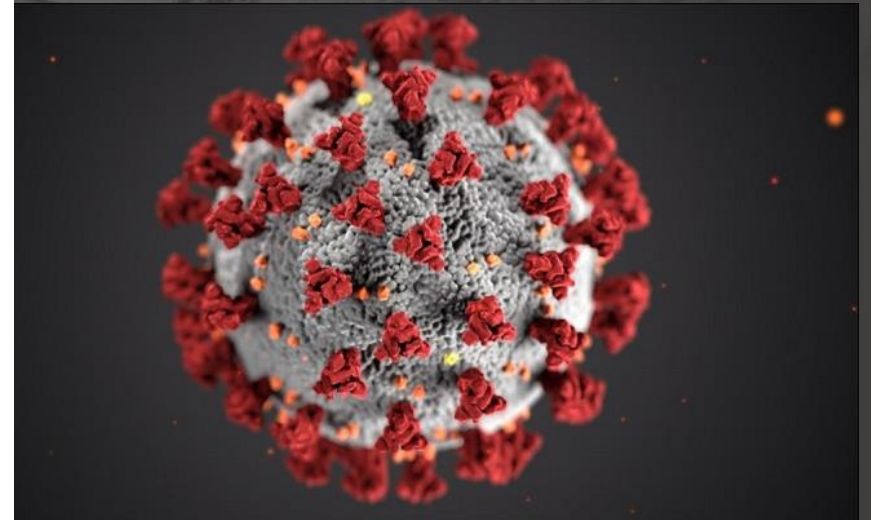


[Europe/UK](#) [Innovation](#)

Blood testing startup partners with Israel's Sheba Medical Center to support COVID-19 quarantine measures

Sight Diagnostics' compact blood analyser has been installed to support the management of infected patients.

By **Tammy Lovell** | March 18, 2020 |



PulmOne



Next generation computational microscopes, portable desktop lung measurements and function testing that within 2 minutes provides accurate measurements

COVID-19 Use Case:

PulmOne's product might be utilized for Pulmonary Function screening of patients who may have contracted the COVID-19 virus, in particular to determine who may get priority for hard to find ventilation.



Pathological telemedicine, the ability to provide a diagnosis to a patient remotely

Tyto Care



Transformative health care that connects people to clinicians to provide home examinations and diagnosis solutions

COVID-19 Use Case:

Tyto Care allows doctors to examine, treat and monitor patients without having to be physically present. This aids in reducing over taxation of the healthcare system and preventing the spread of the virus.



“...a device developed by the Netanya start-up Tyto Care is going to help the Sheba Medical Center, Tel Hashomer, monitor the 12 Israelis returning from the coronavirus-stricken cruise ship”

Source: <http://www.jpost.com/HEALTH-SCIENCE>

Kryon

KRYON

Developed a computer vision and AI-powered Robotic Processing Automation (RPA) solution that **drastically cuts down the amount of time to complete enterprise-level tasks and projects**, with automations.

Kryon's computer vision technology proactively detects which tasks should be automated, as well as reduce design, development and overhead costs.

COVID-19 Use Case:

Within 48 hours enabled large HMO to automatically integrate critical COVID-19 test results with the Israeli Ministry of Health. Prior to the automation, this process would have taken 1 to 2 months of work by several employees.



Real-world examples from Kryon customers include: lowering the time it took a company to issue royalty payments from 50 hours to

THE JERUSALEM POST

Israeli robotic technology on the frontline against coronavirus

Kryon works to create, maintain and manage virtual machines that can essentially be compared to virtual workers.

By ROSSELLA TERCATIN MARCH 25, 2020 19:06



MeMed



A platform for discovery, development and validation of novel diagnostic solutions aimed at improving the management of patients with infectious diseases and inflammatory disorders

COVID-19 Use Case:

MeMed's technology can detect infections before the appearance of symptoms, which could significantly slow down the spread of the virus



“Israeli startup MeMed aims eventually to help officials detect people harboring the virus before any symptoms appear. This is one of the most problematic elements of the current covid-19 outbreak, as people appear to be contagious even before they show symptoms of the disease”

Source: <http://www.israel21c.org>

Israel races to find solutions for coronavirus

Two Israeli startups and an Israeli university are ramping up solutions that may offer long-term help in dealing with the coronavirus epidemic.

By [Abigail Klein Leichman and Nicky Blackburn](#) | FEBRUARY 16, 2020, 3:50 PM

“MeMed: Detecting people who are infected?”

Approaching the epidemic from a different angle, Israeli startup MeMed aims eventually to help officials detect people harboring the virus before any symptoms appear.

This is one of the most problematic elements of the current covid-19 outbreak, as people appear to be contagious even before they show symptoms of the disease.”

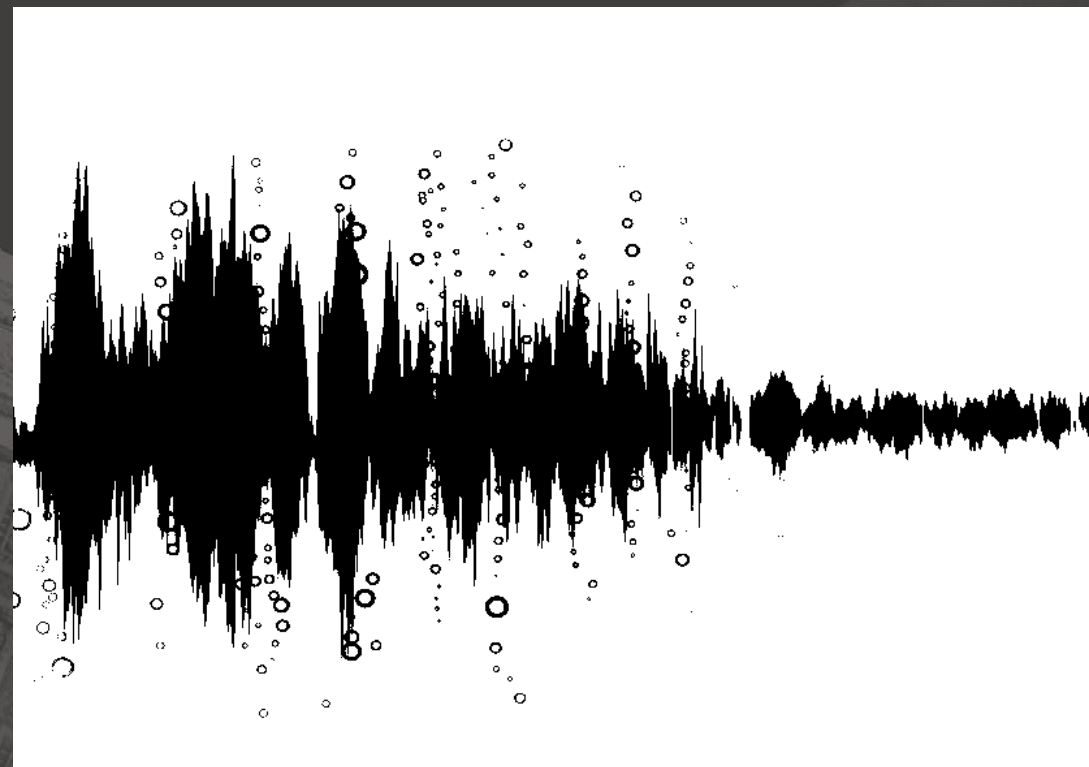
VocalZoom

The logo for VocalZoom, featuring the word "vocal" in black and "Zoom" in a teal color, separated by a vertical bar.

By measuring the vibrations of the skin, the technology can detect temperature change or recent illness

COVID-19 Use Case:

VocalZoom can mass-detect temperatures, singling out potentially infected people in large crowds. May prove useful in large gatherings of people such as airports.



*Contactless sensors that can perform
mass-temperature scanning from a distance to detect people
with fevers*

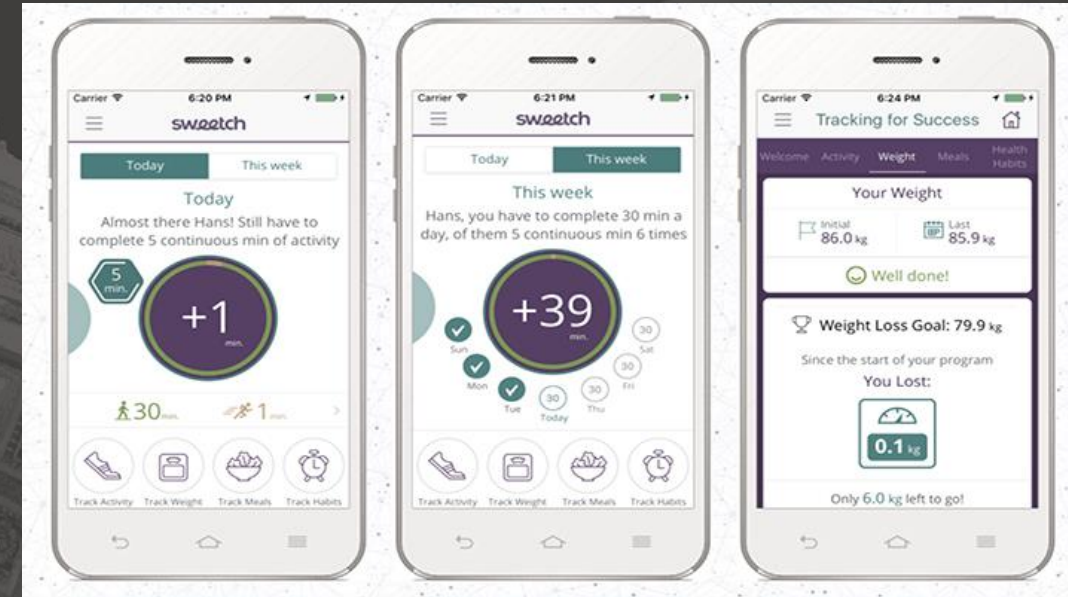
Sweetch



Sweetch is a clinically validated platform that utilizes Artificial Intelligence (AI) to significantly **increase individuals' adherence to essential health promotion, disease prevention and disease management recommendations**, in a highly personalized and scalable way.

COVID-19 Use Case:

Through improving disease control, Sweetch may reduce the risk for severe coronavirus complications in those patients who are most susceptible, by connecting patients and medical teams, to provide continuity of care through ongoing personalized monitoring, follow-up, and treatment adjustment when needed.



Medical areas of focus: diabetes prevention management, Cardiovascular, Oncology and Autoimmune Diseases domains.

data.world



Data.world is the **modern catalog for data and analysis** and enables users to easily collect and integrate data, discover trends, and collaborate on any data set.

COVID-19 Use Case:

Data.world has collected the most up-to-date and trusted open data related to COVID-19. Scientists, analysts, researchers, entire businesses, and others all over the world are working together in data.world to track trends, find clues, and share insights.

COVID-19 Data Center

Join the fight! Analyze and collaborate using up-to-date data from trusted sources like Johns Hopkins, Harvard Global Health Institute, WHO, and others.

JOIN

“More eyes turn to Data.world as COVID-19 pandemic rolls on.”

Source: bizjournals.com

Barcode Diagnostics



Barcode Diagnostics provides a unique technology which assesses the efficacy of different cancer medications directly on the tumor within the patient's body.

COVID-19 Use Case:

Barcode Diagnostics have developed a diagnostic kit and method to effectively increase screening abilities of thousands of suspected SARS-CoV-2 carriers using existing diagnostic tools.



*“ Vital Signs Are Good In HealthTech Software -
..the health industry is now talking about precision medicine, which
needs precision data to run inside precision software applications.
Companies such as Barcode Diagnostics are building technologies
that can put drugs into a ‘nano-particle’ to target specific areas of
the body with treatment. ”*

Source: [Forbes](https://www.forbes.com/sites/adrianbridgwater/2020/03/02/vital-signs-are-good-in-healthtech-software/#1dd5007f24a8). March 2, 2020

TechSee



TechSee's technology enables companies to **virtually enter a space instead of sending a physical field service technician**. Leveraging the camera on the customer's smartphone, the agent sends the end user a link that, when clicked, opens a web app and then broadcasts video back to the remote technician. Moreover, the technician can draw, point, and write on top of the video from their workstation, providing direct visible guidance to the customer.

COVID-19 Use Case:

TechSee allows field service workers (who usually visit multiple sites and locations) to service and fix equipment while **observing social distancing guidelines** which is considered the most effective weapon in the fight against COVID-19.



“[TechSee](https://venturebeat.com/), an Israeli startup with big-name backers such as Salesforce, has announced that it's making its virtual assistance platform available for free to a broad array of vital public bodies in Italy, France, and Spain – where the COVID-19 pandemic is particularly rampant – among other European countries.”

Source: <https://venturebeat.com/>

VentureBeat

How AR and remote video could assist technical support teams during the coronavirus outbreak

PAUL SAWERS @PSAWERS MARCH 18, 2020 8:07 AM



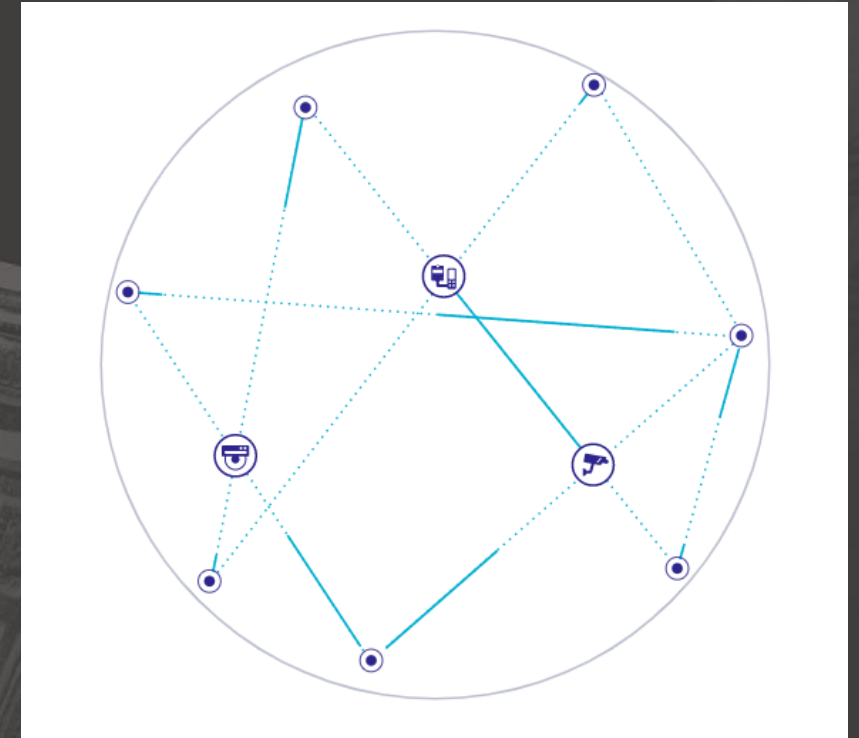
CyberMDX



CyberMDX works to **secure medical devices and improve hospital network security** through its cyber intelligence platform, which manages a hospital's network-connected assets and devices, and monitors threats in real-time.

COVID-19 Use Case:

The need for device protection has never been greater. With thousands of hospitals and medical facilities across the world feeling the strain from the coronavirus pandemic, CyberMDX can help ease their burdens.



“CyberMDX has become one of the more established cybersecurity startups in the medical space, despite being founded only four years ago. Its research arm has already identified a number of vulnerabilities in widely used medical devices... prompting Homeland Security to send out an alert.”

Source: www.techcrunch.com



CyberMDX raises \$20M to help improve medical device security

Zack Whittaker

@zackwhittaker / 4:00 pm IDT • April 7, 2020



Sense

The logo for Sense, featuring the word "sense." in a bold, black, sans-serif font, with a blue horizontal line underneath the word.

Empowers instructors to provide **personalized feedback** on many types of free-answer questions in STEM (science, technology, engineering, mathematics) courses **at large scale**, and making grading faster, fairer and more personalized.

COVID-19 Use Case:

As educational institutions from K- university close for weeks/months due to coronavirus, remote learning solutions have become indispensable. Key to making these distance learning implementations work is the ability to conduct free form testing for code, essays, statistics and more.



“Millions of U.S. students will abruptly switch to learning remotely this week amid the coronavirus pandemic, pushing school administrators and teachers to establish on the fly ways to transfer the classroom to the home.”

Source: WSJ: March 16, 2020

Guidance for Portfolio Companies

Pre-crisis preparation

- Since Jan 2019 we have helped our companies raise significant follow on rounds (32 companies raised \$480M)
- As a result, our average company runway, coming into the crisis, is >12 months

In-Crisis reach out

- We are talking to every company in our portfolio to make sure they get the maximum help and guidance from OurCrowd and our network
- The world has not ended, many of our companies are closing transactions and receiving Term Sheets

Guidance for Portfolio Companies (cont'd)

Our messaging to companies

- Don't fight the wave, ride it – Figure out how your business is relevant this new world setting
- Talk to your customers and watch your revenue closely
- Re-evaluate CAC/LTV – Sales cycles, Churn, Lifetime Value should be reassessed
- Cut your burn to extend runway - Shaving \$200,000 off your monthly burn rate is equivalent to raising \$2,400,000 of new capital

Companies need to stay relevant

- Companies will need to stay relevant as much as possible in an environment where everyone is focused on the crisis
- Long term trends (distance learning, ecommerce, work from home, etc) are now reaching inflection points due to crisis and they are reaching the point of no return
- Technologies for fighting pandemics are not a one-time “trendy” hype; pandemics are here to stay, and we need to be ready for the next one
- Technologies to fight this and other pandemics have not received enough investor attention-this has changed.
- Many of our companies are serving remote access, social distancing, automation, and more—such that many more companies that you would think are “crisis relevant”
- While the environment for funding has become more challenging, investments are getting done, especially for those companies who are relevant and with proven business models and track records

What should investors do?

- Be calm, have some perspective
- Many of us have been here before; this is not our first crisis
- Things have changed dramatically in the last several weeks
- Deals are still getting done; term sheets and closings daily
- Yet other investors are pulling back, delaying and abandoning investment plans
- Valuations will be negatively affected, and will come down for many companies
- Not all companies will be able to raise money in this environment
- Investors will need to triage their investments; who should you focus on?
- Make sure you back your winners

Your portfolio is your friend

- ☐ Smart Startup investors always have a portfolio
- ☐ If you don't have 10+ investments, you have too much concentrated risk
- ☐ Your portfolio should be diversified according to:
 - Sector
 - Geography
 - Vintage
 - Stage
- ☐ Try and keep portfolio commitments relatively balanced
- ☐ Funds are good ways to get portfolio protection
- ☐ OurCrowd's OC50 Fund is a great way to get this protection

The art of follow-on investments

- You must reserve money for follow-ons
- We recommend at least 100% of your initial investment
- Follow-on's make sense when companies are doing well
- Sometimes companies are faced with down rounds, and they make sense too (although not always)
- The way you manage your portfolio through these follow-on opportunities will be critical to your performance
- We will try and support you as best we can.

Back in 2008...

Facebook: Get Ready For A Down Round



Nicholas Carlson



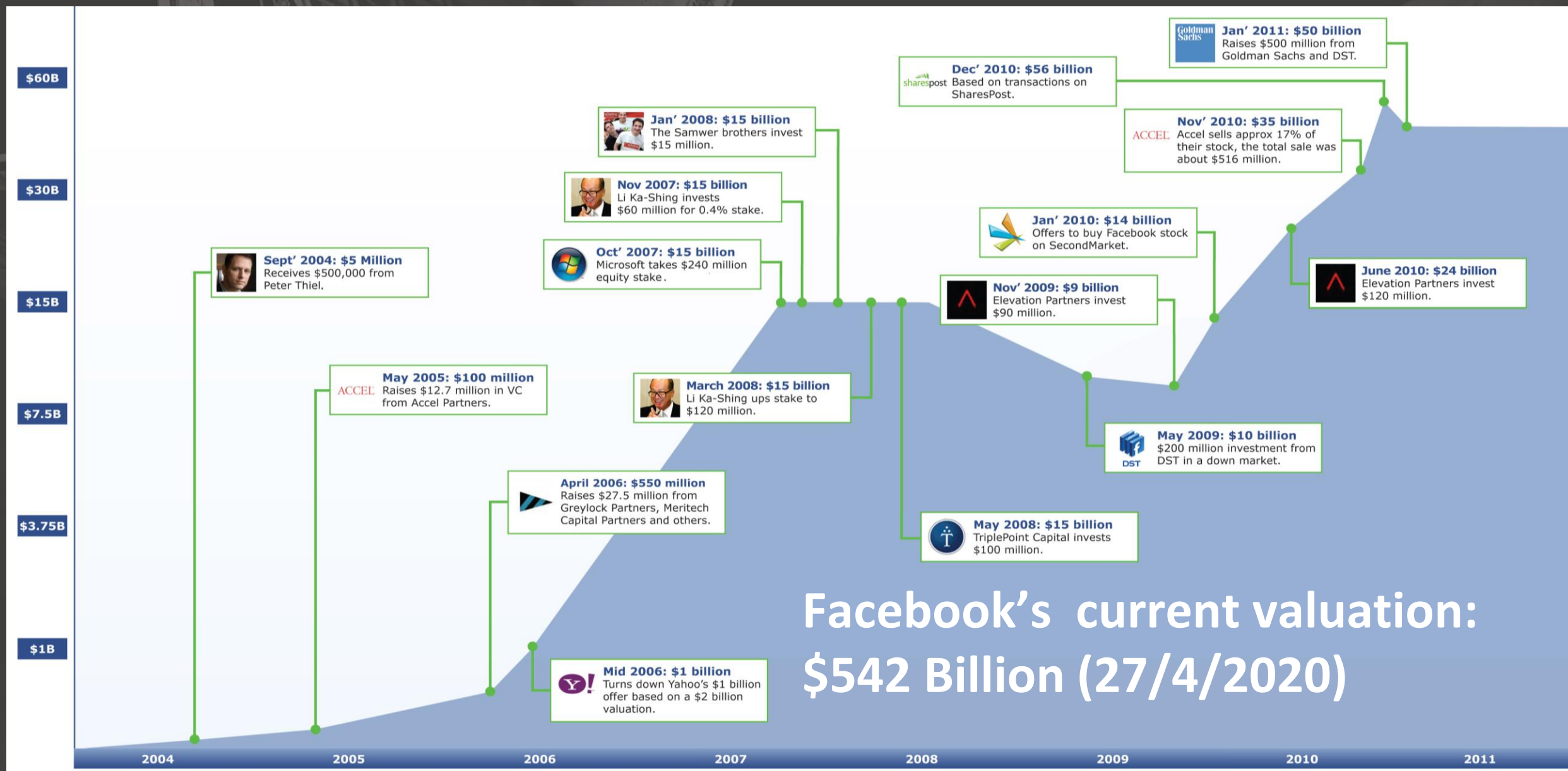
Dec. 15, 2008, 9:13 AM

Everyone's whispering it, and it certainly makes sense: Facebook will likely take its next round of funding at a valuation lower than the \$15 billion Microsoft set when it bought 1.6% of the company for \$240 million in 2007.

This will prompt a lot of Bronx cheers, but we think it will actually be a good thing for the company -- a chance to reset employee and investor expectations and regain the attractive



Facebook's valuation over time



Vintage is really critical

- Just like you “average in” investment in public markets, so should you behave in a similar manner in private markets
- Hard to pick which Venture vintage will turn out to be winners
- But there is lots of data about how the best VC vintages were in years when there was a downturn
- This makes sense since valuations are down, and VC realizations take place generally years later when valuations have recovered



For additional information:

<https://milkeninnovationcenter.org/>

<https://finder.startupnationcentral.org/>

<https://www.coronatech.org.il/>

<https://www.ourcrowd.com/>

<https://milkeninstitute.org/covid-19-tracker>

INVESTMENT INSTITUTE 2020



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