



# **From Hype to Ripe** Implementing AI in Health Systems

Yael Ophir, HealthIL







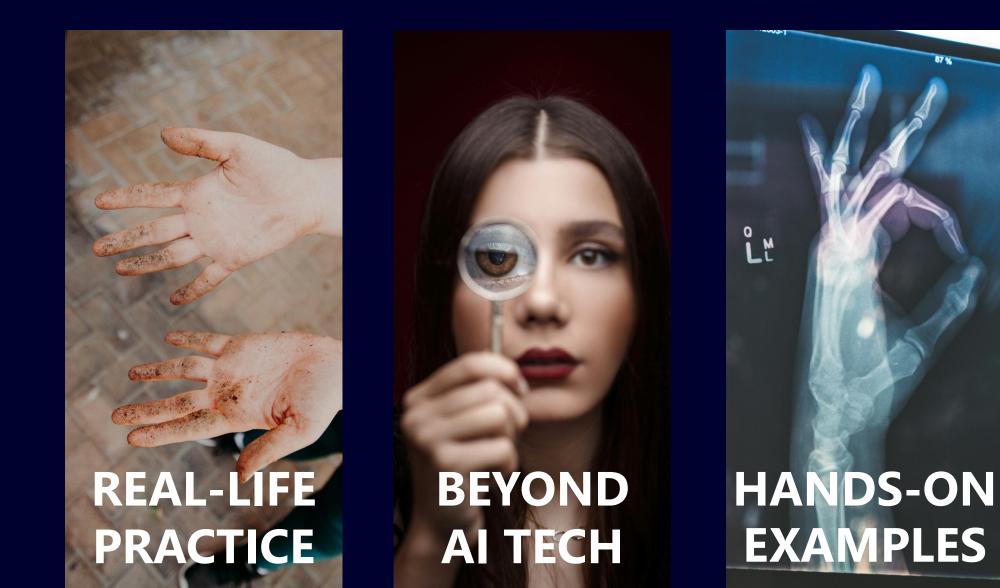


רשות החדשנות L> Israel Innovation L רשות Authority



#### **A DIFFERENT PERSPECTIVE**





# WE ARE HealthIL

We Empower Health Systems by Building Innovation Management Infrastructure, and Connecting them to the right Tech Solutions and Startups

>>To benefit citizens and governments worldwide



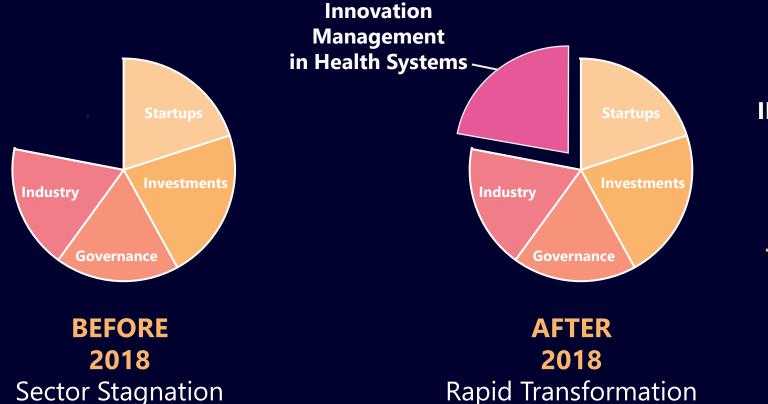








#### ISRAEL USE CASE Innovation Management as the Missing Link



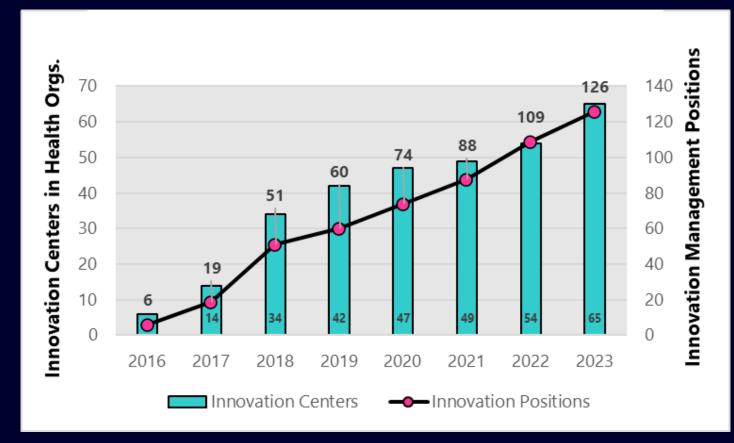
10-FOLD INCREASE IN PILOTS w/STARTUPS INCREASED GOV FUNDING

SHIFT FROM PILOTS TO IMPLEMENTATION



## Healthcare Innovation Growth in Israel

#### HealthIL: <u>Developing Innovation Management in Israel</u>

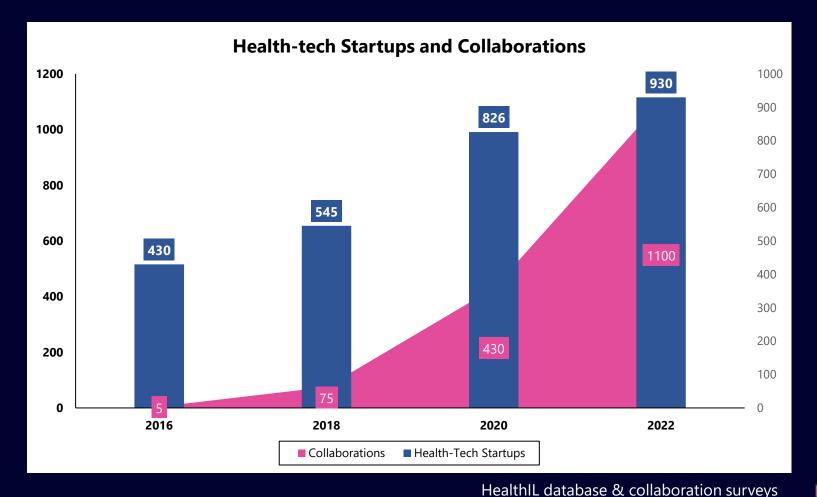


HealthIL database



#### **HealthIL: Driving Collaborations with Startups**

Innovation Management is the "missing link" needed to increase collaborations







Empowering Innovation Management in Health Organizations Fostering Effective Collaborations with Startups and Innovative Technologies Supporting Transformation in Healthcare Through **Policy and Infrastructure** 

**Connecting Ecosystems Worldwide** 

to Leverage Healthcare Assets



#### 45 Original Reports, Tools and Articles



#### 750M ILS Health Gov Budget Support [65%]

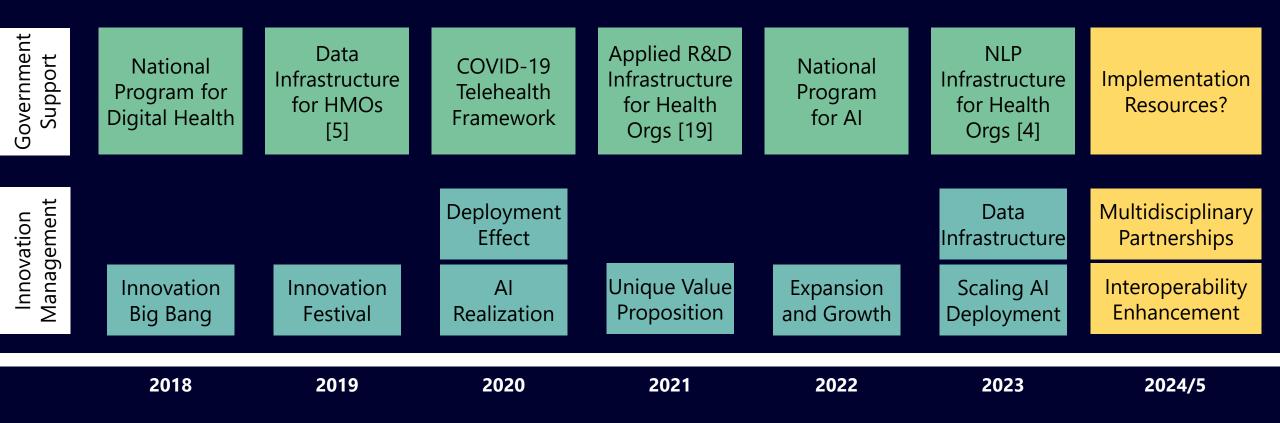


#### 300+ International Network Partners



## **INNOVATION INFRASTRUCTURE & AI**





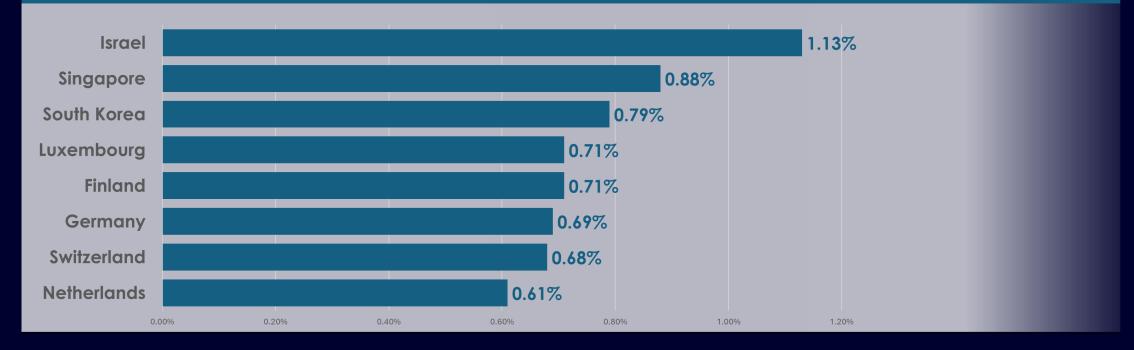


#### **Al** Talent

Al talent concentration by geographic area, 2023



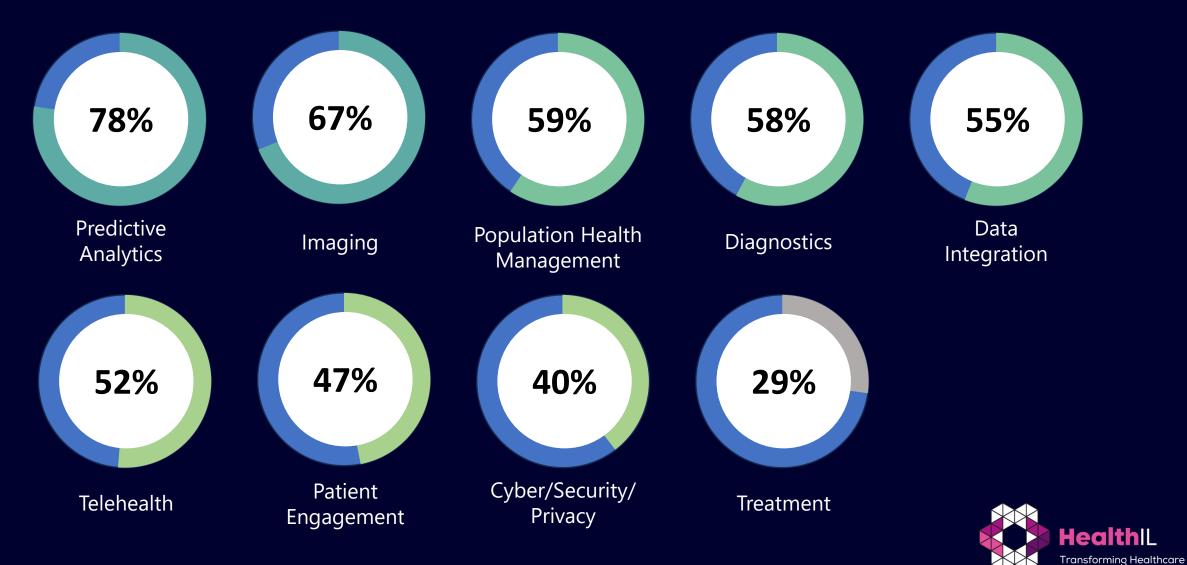
Source: LinkedIn, 2023 | Chart: 2024 Al Index report





## **AI COMPONANTS OF STARTUP COMPANIES**

1,092 Startups

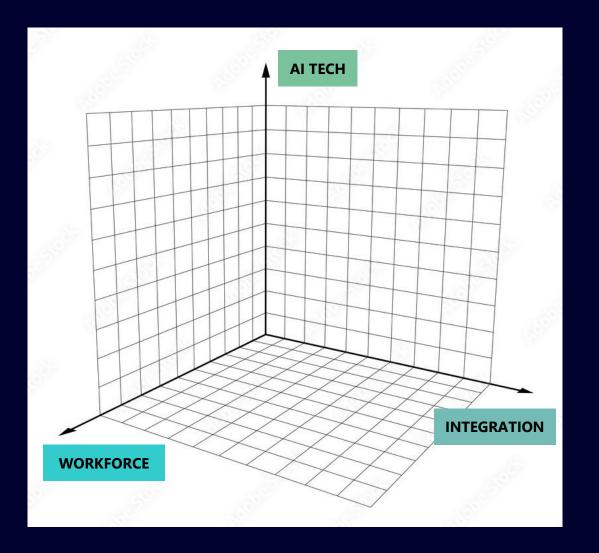


#### **3 DIMENTIONS AFFECTING AI IMPLEMENTATION**

AI TECH	INTEGRATION	WORKFORCE
ML SUPERVISED	IT & EHR	CHANGE & RESISTANCE
ML UNSUPERVISED	DATA STANDATIZATION	TRAINING, EDUCATION
DEEP LEARNING	SYSTEM CONNECTIVITY	SEAMLESS OPERATION
DEEP NEURAL NETWORK	CLOUD POLICY	INNOVATION ENAVBLERS
GENERATIVE AI	LEGAL & REGULATION	INCENTIVES
•••	•••	•••



#### **3 DIMENTIONS AFFECTING AI IMPLEMENTATION**





#### **EXAMPLES OF AI IMPLEMENTATION**



NEARLY

**REAL-TIME** 

INTERVENTION

**GALILEE MC** 



EARLY DETECTION OF CANCER (OSCC) TZAFON MC



NATION-WIDE DECISION SUPPORT TOOL CLALIT HC



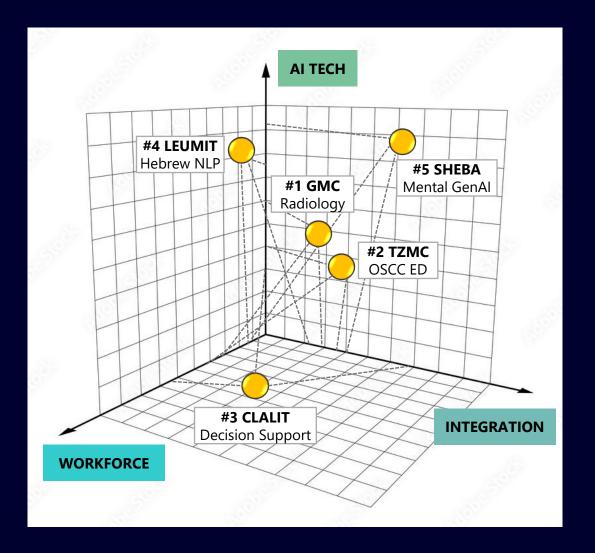
NLP IN HEALTHCARE IN HEBREW (!) LEUMIT HC



GENERATIVE AI FOR MENTAL HEALTH SHEBA MC



#### **3 DIMENTIONS AFFECTING AI IMPLEMENTATION**







## **NEARLY REAL-TIME INTERVENTION**

health

#### exposure

# For the first time in Israel: artificial intelligence saved the life of a patient in Nahariya hospital

The patient was directed to undergo a non-urgent brain CT scan • Immediately after the test, a unique application that is only installed at the Galilee Medical Center in Nahariya recognized that he was suffering from a cerebral hemorrhage • He was rushed to surgery and his life was saved • The "hospital: "We will be the first in Europe to use it to manage trauma cases

> This cloud-based system is accessible on mobile devices for a broad spectrum of medical professionals



Promptly alerts and distributes critical data to physicians for immediate intervention, Designed for the management of complex emergency scenarios

An Al-enhanced platform detecting Life-Threatening Diagnoses through imaging



NATION-WIDE DECISION SUPPORT TOOL

Al platform for general practice in primary care

This system provides every physician with an easily accessible, one-screen interface that offers fully explainable AI insights

Nothing is a black box. Every recommendation is broken down to the medical logic behind it, allowing physicians to trust it gradually

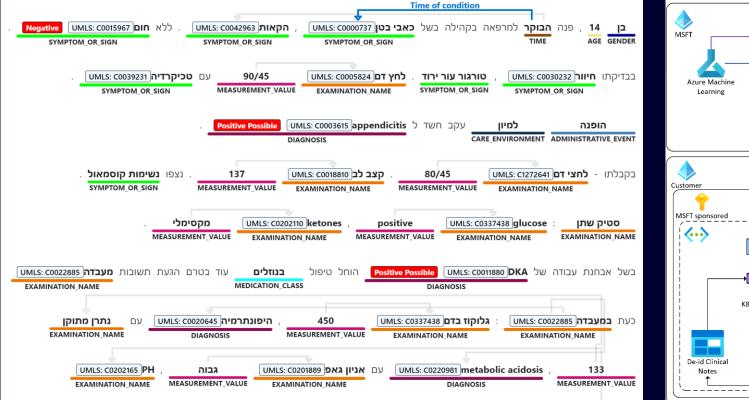
>Proactive appointments
>Treatment adjustment

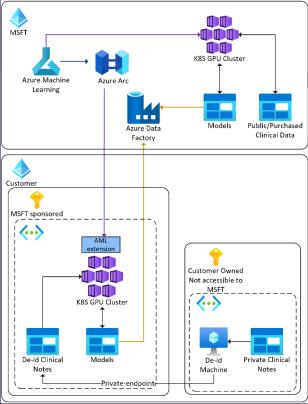




#### **NLP IN HEALTHCARE IN HEBREW**



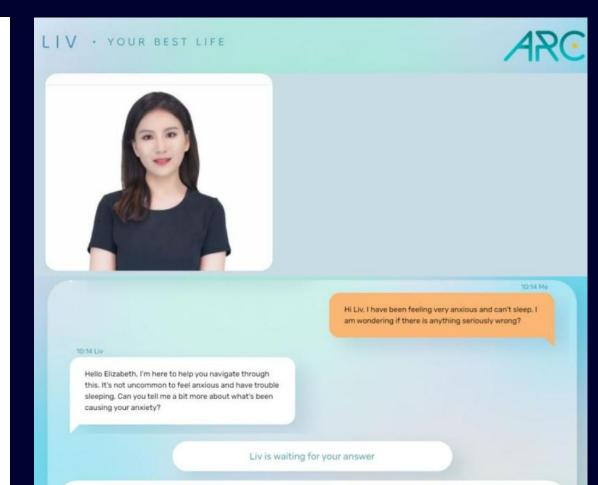




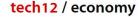




## **GENERATIVE AI FOR MENTAL HEALTH**







#### The conversation with the chatbot will check if you have developed post-trauma from the war

Microsoft Israel Research and Development employees, who wanted to help the rehabilitation effort from the events of October 7, developed a chatbot that performs an initial diagnosis of post-trauma victims • The development replaces the closed questionnaires with a free language conversation in the ChatGPT style, which according to the researchers was found to be more effective • The chairman of the National Council for Post -Trauma Prof. Eil Fruchter: "A quick diagnostic tool could help in targeting the "target populations and adjusting the therapeutic response

16:32 Updated 01/23/24 | 15:18 Published 01/23/24 | N12 | Shay Ringel





## **MY TAKE HOME MESSEGE**

- Taking into consideration the
   3 dimensions while planning a deployable AI solution
- Nation-wide capacity-building programs could serve as a key catalyzer and innovation sensor

A computer does not 'solve' your problem; it enables you to solve your problem yourself. The Moon Is a Harsh Mistress

de Bookey







# Contact Us Boost your Transformation

