Israel Unveils National Data Infrastructure to Power the Next Wave of AI-Driven Health and Agriculture Innovation

NIS 44 Million Government Investment Launches Six National Data Bases to Accelerate Breakthroughs in Personalized Medicine and Smart Agriculture

Dror Bin, CEO of The Israel Innovation Authority (Credits: Israel Innovation Authority)

JERUSALEM, ISRAEL, December 17, 2025 /EINPresswire.com/ -- The Israel Innovation Authority, together with the Ministry of Economy and Industry, the Ministry of Agriculture and Food Security, and the TKUMA Administration, to lead the establishment of national data infrastructures in the fields of health and agriculture. As part of this initiative, Israel is launching six national data bases, supported by an investment of NIS 44 million, aimed at accelerating breakthrough technologies in medicine and agriculture. A total of 16 applications were submitted, of which 5 projects were approved.

The new data assets will bring together comprehensive medical and agricultural datasets, unlocking capabilities such as personalized therapies, early disease detection, real-time adaptive agriculture, and advanced data-driven insights. These assets will serve researchers, physicians, and technology companies across the country and are being developed through broad collaborations that unite universities, health maintenance organizations (HMOs), hospitals, and leading high-tech companies from across multiple sectors.

This initiative marks a significant new phase in Israel's use of data as a foundation for artificial intelligence development. The creation and accessibility of national data bases are a central

component of the second phase of Israel's National AI R&D Infrastructure Program. By transforming years of accumulated data, alongside newly collected datasets, into accessible, high-quality infrastructures, the program is designed to accelerate breakthroughs in medicine, agriculture, manufacturing, and climate-related fields.

For the first time, government entities, research institutions, and technology companies will gain direct access to large, regulated data repositories, complemented by advanced R&D services that support AI model training and the development of innovative solutions.
The establishment of these data bases addresses a long-standing need within both industry and academia for access to high-quality, structured data. The investment will enable the aggregation of existing data sources, the collection of new data, and the development of accessible cloud-based infrastructures available to organizations throughout Israel. These infrastructures are expected to remove barriers that have historically slowed the development of AI-driven products and services.

By enabling the development of precise medical tools, real-time identification of agricultural trends, optimization of advanced manufacturing processes, and the strengthening of Israel's response to climate challenges, the initiative is set to deliver a wide-ranging impact. The national data bases will provide Israeli companies with a significant competitive advantage on the global stage and help position Israel at the forefront of AI innovation in these domains, driving technological growth, expanding collaboration, and creating new opportunities for a resilient and leading Israeli economy.

Dror Bin, CEO of the Israel Innovation Authority, said: "The establishment of national data bases is a major leap forward for Israel. Instead of knowledge being scattered across systems and institutions, we are creating unified data repositories that are open for use by both the high-tech industry and academia. The R&D conducted on these repositories will enable early disease detection, the development of personalized treatments, and the creation of agriculture that responds in real time to climate change. These data bases are the fuel powering national AI systems and will allow us to develop advanced models that strengthen Israel's healthcare, agriculture, and industrial sectors. This step positions Israel at the global forefront in these domains and provides Israeli companies with a significant competitive advantage."

Moti Gamish, Director General of the Ministry of Economy and Industry, said: "The establishment of national data infrastructures is a strategic growth engine for Israel's economy. High-quality, accessible data is a foundational requirement for advanced industries, AI-driven innovation, and strengthening the global competitiveness of Israeli companies. This investment connects research, industry, and technology, removes development barriers, and enables Israeli companies to translate knowledge into business excellence, exports, and new growth engines for the economy."

Aviad Friedman, Head of the Tkuma Administration, said: "The Tkuma Administration's five-year plan views agriculture as a central growth engine for the region and aims to transform it into an

internationally advanced and innovative sector, while also establishing a thriving ag-tech industrial ecosystem. An agricultural data base is a key infrastructure component required to position the region as a center for applied research for academia and industry, whose outputs will improve local agriculture, strengthen international competitiveness, and prepare it for future challenges, including climate change."

Oren Lavi, Director General of the Ministry of Agriculture and Food Security, said: "The agriculture of tomorrow is built on smart agricultural intelligence and high-quality data. The data assets selected and established under this important initiative will consolidate real-time data on soil, climate, crops, and pests, enabling researchers and technology companies to develop innovative solutions and drive meaningful breakthroughs in agriculture. Over time, these data infrastructures will allow Israeli farmers to improve productivity, better prepare for climate challenges, optimize daily operations in the field, and strengthen Israel's food security."

Selected Projects

MIGAL – Galileo Commercialization Technologies
Advanced Agriculture Data base in Northern Israel

Additional partners: Agmatix, Tzemach, Netafim, GrowingIL
The program focuses on establishing a large-scale agricultural data repository to support product development, insight generation, forecasting, and risk management across the agricultural value chain (academia, industry, and government). The initiative will aggregate and standardize partner-contributed data using proven technology developed by Agmatix. The business model includes six different service types tailored to diverse customer needs.

ISG Intelliges

The initiative will focus on collecting and processing agricultural field data in the Gaza Envelope region and making it accessible alongside trained models to improve crop quality, increase yields, and develop new technologies. The program includes the establishment of hardware and software systems that collect diverse existing and new data, organize it, and make it accessible (cleaning, filtering, normalization, archiving). ISG is a corporation owned by Negev kibbutzim cultivating approximately 500,000 dunams of crops, orchards, and field agriculture, and provides agronomic services.

Hadassah Medical Center / Hadasit
National Oncology Data Base

Additional partners: Meuhedet, Medica, AWS, NVIDIA, Matrix DNA
Oncology R&D requires high-quality, multimodal data infrastructures. Today, such data is fragmented and inaccessible. Hadassah, Meuhedet, and Medica aim to establish a unique oncology data repository with deep historical data and flexible technological architecture,

including community, pathology, imaging, laboratory data, organoid datasets, and genomic sequencing. AI tools will be integrated to enable advanced data analysis.

MeMed
Clinical and Proteomic Data Base with Emergency Department Collection

Additional partners: Technion Proteomics Center, Soroka Medical Center, Galilee Medical Center, Meir Medical Center
MeMed is partnering with leading medical centers to establish a proteomic and clinical data infrastructure and a biological sample bank from 2,000 patients at the acute stage of illness upon ER arrival. The data base is globally unique and will support AI-based diagnostic tools and advanced validation research.

Sheba Impact Center
Advanced Oncology Data Asset
Partners: Assuta Ashdod, Leumit, Meuhedet

The initiative will establish a distributed oncology data infrastructure supporting federated learning, integrating clinical, genomic, pathological, pharmaceutical, radiological, and textual data, alongside AI tools for advanced data exploration.

Clalit Innovation
Data Assets for Obesity and GLP-1 Treatments and Parkinson’s Disease

Clalit Innovation will create centralized innovation and regional research hubs to enable access to clinical data. The initiative includes the development of an “Ocean” platform for patient journey management, integrating unstructured text, imaging, genetics, and behavioral data, alongside collaboration with Latica to incorporate global healthcare datasets.

Raoul Wootliff
N10S
+972546921720 ext.
email us here