

Israeli Nanotechnology and Optronics Environment

Are We All Loosing an Opportunity?

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Entrepreneur

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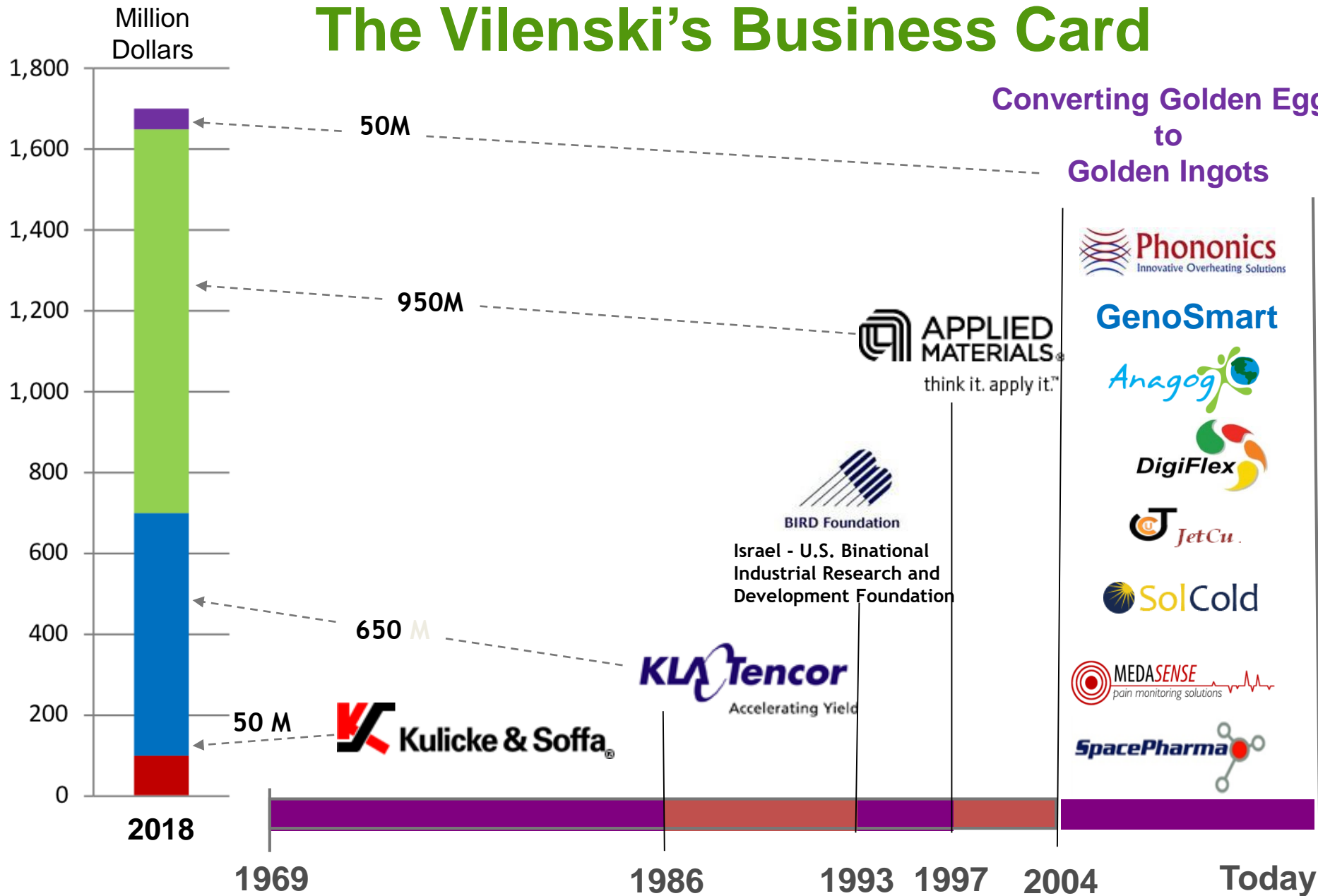


The Objective of my Presentation

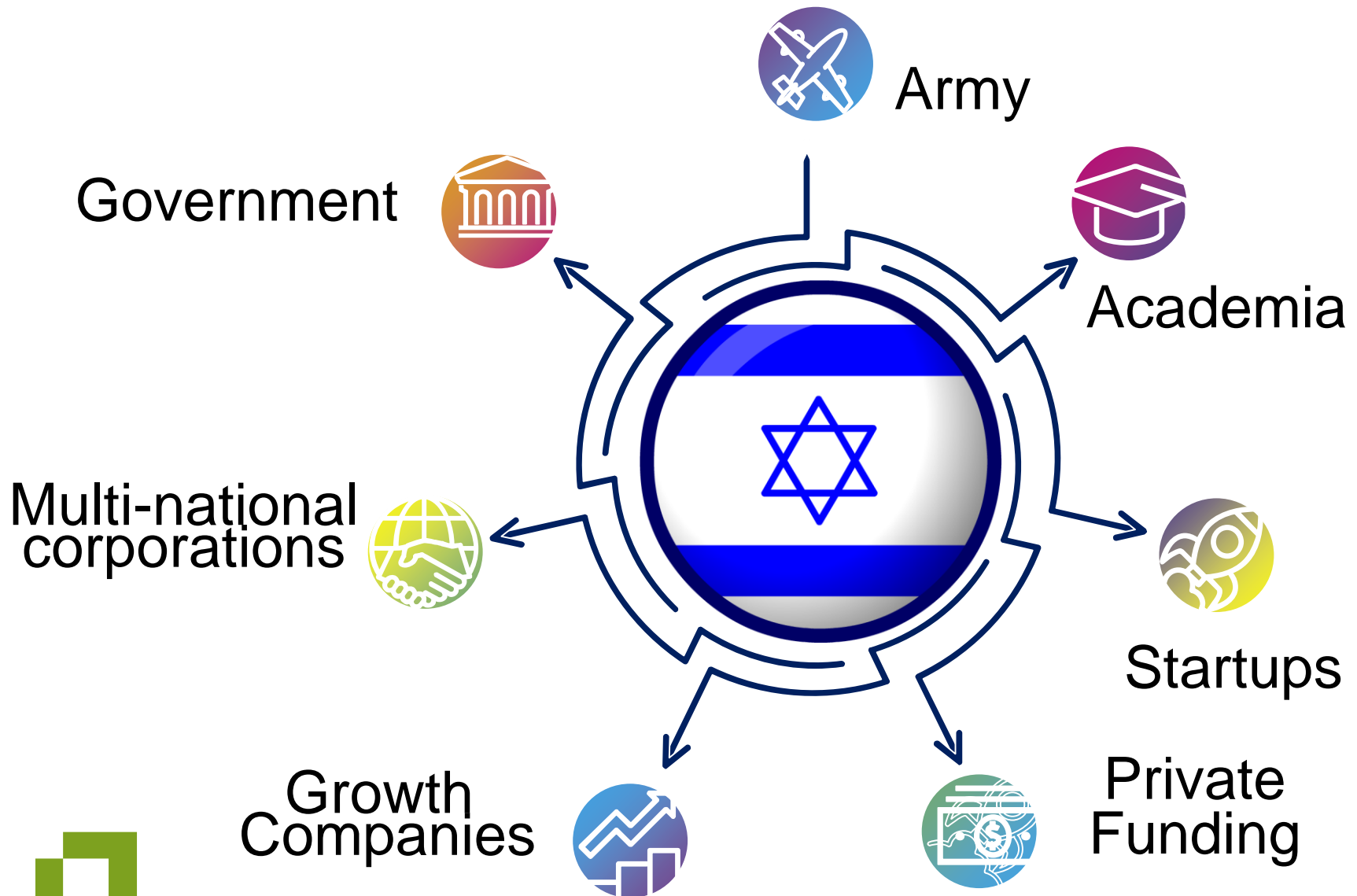
- ❑ To present the Israeli Nanotechnology and Optronics Environment
- ❑ To convince the participants that we all are loosing great business opportunity
- ❑ To discuss several cooperation models to the benefit of both parties

The Vilenski's Business Card

Converting Golden Eggs
to
Golden Ingots



Israeli General Business Environment



Foreign Subsidiaries in Israel

(partial list)

- Intel
- Microsoft
- IBM
- Sun Micro systems
- CA
- EDS
- Cisco
- 3 Com
- HP
- Texas Instruments
- National S.C
- Alcatel
- Philips
- Ericsson
- Nokia
- EMC

- Marvel
- ST Microelectronics
- Infineon
- Analog Devices
- Vishay
- AVX (Kyocera)
- General Electric
- Philips Medical
- Medtronic
- Boston Scientific
- Motorola
- Lucent Technologies
- Avaya
- Nortel
- Siemens

- ADC
- Qualcomm
- **Applied Materials**
- **KLA - Tencor**
- Kulicke & Soffa
- **Bio-Rad**
- BAE Systems Ind.
- Astronautics
- Sigma
- Invitrogen
- J&J
- Merck
- Deutsche Telekom
- British Telecom
- Daimler Chrysler

Photonics Israel Mission Statement

Joining forces of all the members in the photonics ecosystem in Israel, in order to enable a significant growth of the photonics companies and the national economy.

Photonics Israel Objectives

- Develop and promote effective match making tools (Data base ...)
 - Enhancing cooperation between all ecosystem elements in Israel
 - Establishing communication channels with the **international** photonics community
- Promoting the needs of the industry at the national level
- Enhancing photonics education and training at all levels

Photonics Israel

The Environment

- ❑ More than 500 researchers in 7 universities
- ❑ More than 350 companies
- ❑ Total industrial revenues – Above \$5Billion (90% export)
- ❑ More than 20,000 employees (5,000 in R&D)
- ❑ Strong infrastructure for Research, Development, Production, Assembly and Testing
- ❑ Advanced National Photonics center

Photonics Israel

continued

- About 350 companies : Big, Medium and many Small/Startups

Applications

- *Metrology*
- Medical
- Defense
- Automotive
- Communication
- Consumer

Technologies

- Imaging
- Lasers
- Detectors
- Machine Vision
- Space Optics

Integration

- Systems
- Products
- Components

Some Multi Nationals centers in Photonics



We make it visible.



GE Healthcare



Israeli National Nanotechnology (INNI) program

- ▶ Strong leadership and focus are the key ingredients for success
- ▶ Cooperation between scientists from the 6 Israeli universities is possible
- ▶ Creating a strong link between financial support and achievements of tangible results is an effective tool for meeting the objectives of the program
- ▶ Optimization of the distribution of research capital equipment among universities provides effective use of funds

**The result: Israel is on the International
Nanotechnology map**

Success Criteria's of First 10 Years

▶ Number of world-class leading scientists recruited as faculty members	88
▶ Number of Ph.D. students	849
▶ Number of published scientific articles	6,067
▶ Number of cooperation projects with industry	625
▶ Number of patent applications	704
▶ Number of "success stories" (patents licensed, patents/ IP applied by startups, etc.)	171



Collaboration

Cooperation Models

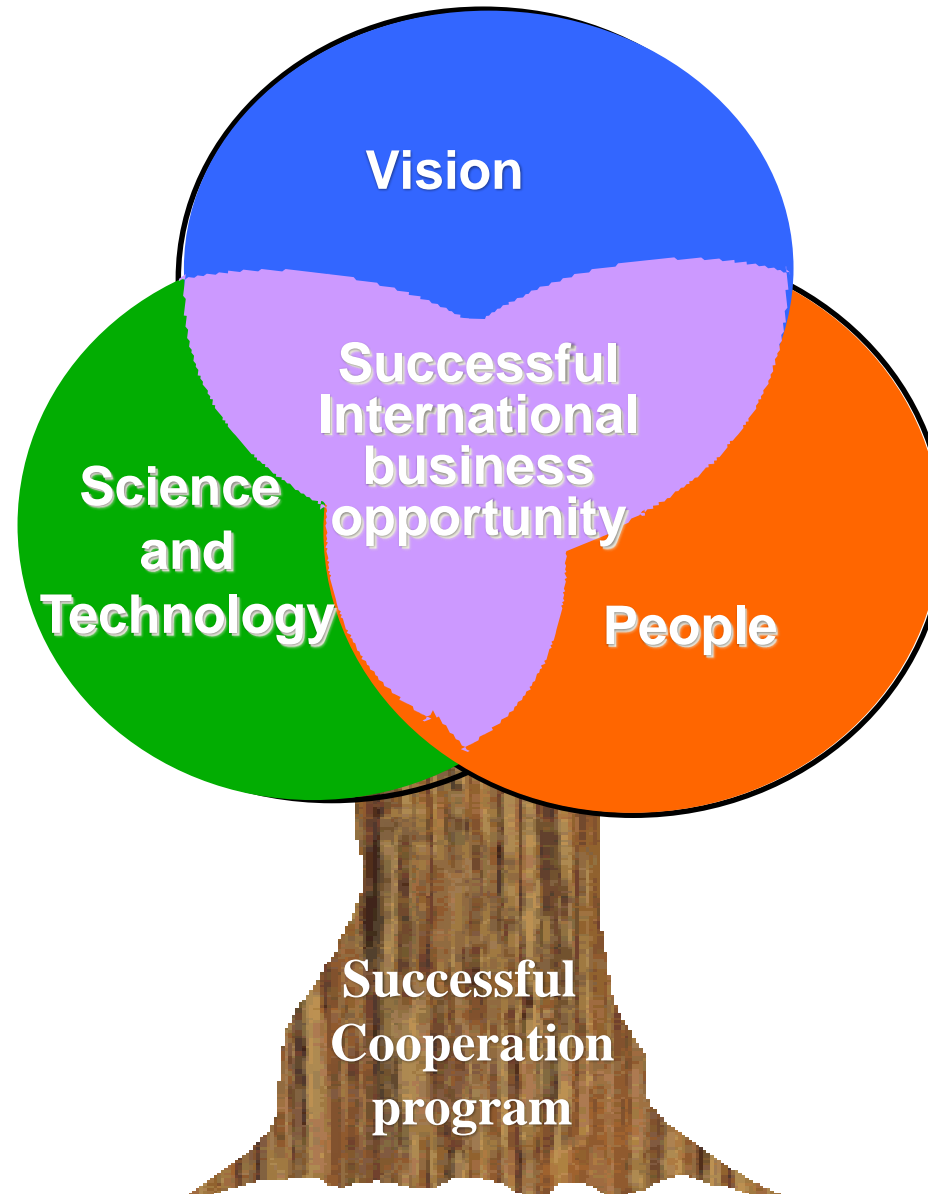
- ❑ Join Venture (JV)
- ❑ Exchange Intellectual Property (IP)
- ❑ Joint Development
- ❑ Joint Development and Manufacture by third party
- ❑ European Union
- ❑ BIRD-F for US based companies
- ❑ Acquisition

Potential Financing

- ❑ Israeli Innovation Authority
- ❑ European community
- ❑ Venture Capital (VC)
- ❑ BIRD-F for US based companies
- ❑ Cooperation program in which one side finance the other for equity

However - If a cooperation program is benefitted equally to both parties, no money will change hands

Necessary Cooperation Ingredients for International Cooperation



Let's Try

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