Innovation ecosystems for sustainable development

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Strategy = Leadership in the Future

Leadership in the future = Adapting to change
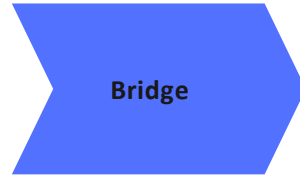
Adapting to change = Innovation

Strategy = Innovation

Innovation Execution

2019 Major Industries

2030 High Growth Industries

Present

Bridge

Future

Health, Energy, Agriculture etc.

Entrepreneurial Economy Cluster Approach

Smart Cities, Digital Health, Mobility, Clean Energy etc.

SMART CITY

MOBILITY

AGRO TECH

?

CLEAN ENERGY

DIGITAL HEALTH

?

Innovating for Business & Social impact

No standardized approach or linear path to the future state.

The way forward will depend on size and business mix.

Fundamental rethinking of all aspects of operating model & incorporation of one or more of the following three strategic plays:

- Digital Play
- Partnership Play
- Adjacency Play

Our Innovation People Strategy

Challenge: Rapid Urbanization <--> Solution: 4th Industrial revolution & Innovation

- Bringing people, technology, and ideas together.
- Mingle talent, technology & innovation.

People first

- Technology at the service of people and not the other way around.
- Developing talent among staff and a business ecosystem (universities, public administrations, entrepreneurs, and companies, among others).
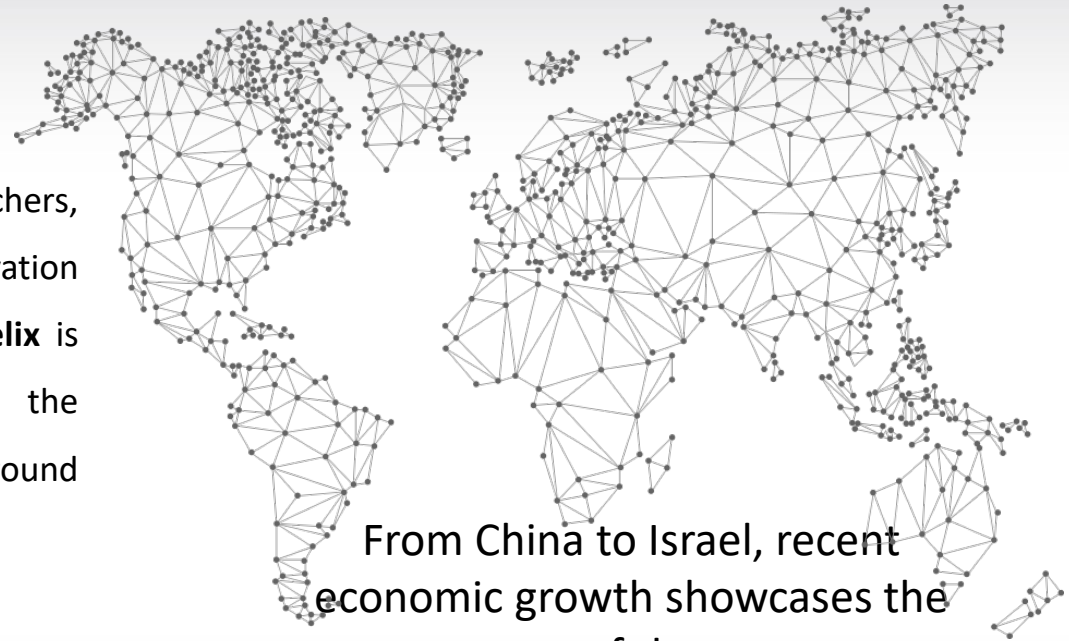- Synergy for integrative innovation, not only to make us and our stakeholders grow .

Creation of a brand-new RD&I Ecosystem

- Trusted partnerships with the extended Innovation ecosystem in Greece (Universities, R&D Centers, SMEs, Startups).

- Credible ecosystem network with 40+ organizations SMEs & startups.

- Collaboration in funded opportunities, innovation initiatives, strategic projects, technology enablement, capacity building.

- Utilization of this new ecosystem through joint participation in many commercial projects (Greece/EU).

- Our strategy: further develop & utilize this new ecosystem to develop new markets/technologies.
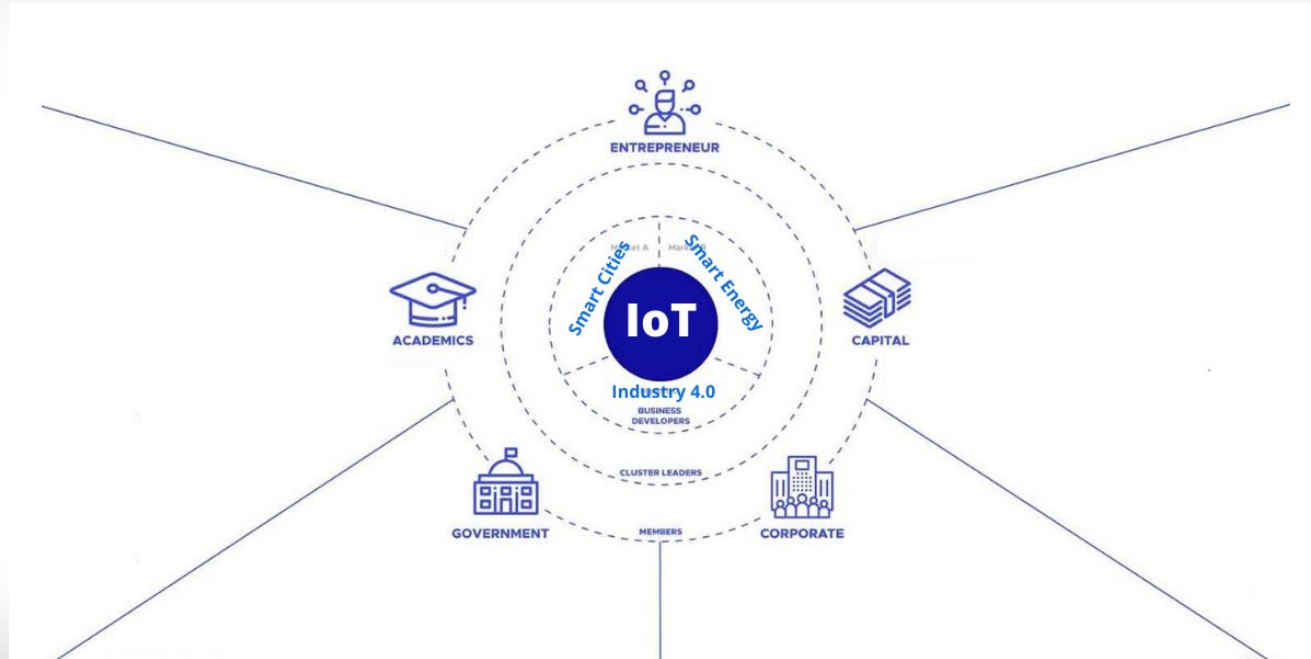
The Shifting Paradigm

Over the past 10-20 years, researchers, practitioners and emerging innovation economies have shown that the **Triple Helix** is insufficient to explain and support the entrepreneurial ecosystems emerging around the world.

From China to Israel, recent economic growth showcases the power of the more "entrepreneurial economy".

A New Approach

Why Innovation Clusters?

- Support specific industrial strategies, (e.g. Industry 4.0).

- Response to industrial & sectoral crises in specific geographical areas, also related to the crises of large enterprises.

- Clusters can be driven by Public Private Partnerships, sustainability does not rely on public funding.

- Initiative of administrations in different countries / regions.

- Motivated by EU:
  - National or regional research and innovation.
  - Development programs and initiatives.
  - Horizon 2020, European Structural Investment Funds etc.

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Clusters' Investments Programs

16.75 Billiion €

2.32 Billion €

The Research Innovation Enterprise (RIE) 2020 Plan **is Singapore's five-year research and innovation programme**

*it was around EUR 14.11 billion in the previous programming period.

Public funding for clusters (planned investments under **the European Structural and Investment Funds**) (**ESIF**)

IoT Clusters Application Domain Highest Weights 2012-2018

- Highest weight is the Smart Industry

- Smart City (second most important domain) & Smart living
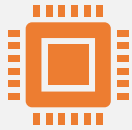
- Smart Energy & Smart Environment

IoT Emerging Industries

- Smart Cities
  - Energy/Water management
  - Waste management
  - Traffic/street lights, traffic flow, Rural lightening
  - Mobility: Electric cars, Maritime
- Industry 4.0
- Agriculture / Farming
- Logistics: Supply Chain / Traceability

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IoT Ecosystems

Solutions of large heterogeneous systems beyond IoT platform

Solve technical challenges in different industrial verticals & across verticals.

A new approach around value creation & capture, monetization of end-users value as presented.

Assessment of requirements for future deployment across the digital value chain, in various industries & many application areas

Better data exchange, use of standardized interfaces, interoperability, security, privacy, safety, trust to generate transparency & more integration in all areas of the Internet (consumer/business/industrial).

Challenges of Current Business Model

- Diversity of things.
- Innovation Immaturity.
- Unstructured ecosystems.
- New business models.
- Many stakeholders.

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Innovation Clusters are

Engines of Economy Growth

Solving Industry level challenges & opportunities

Magnets that attract talent, capital, researchers and companies

Trust-based collaboration platforms

Industry **influencers**

Private-public **Partnerships**

SME's Benefits

Access to better support services with respect to business development

Access to **collaborative funding**

Access to better support services with **respect to internationalisation**

Access to training and coaching programmes for **innovation skills**

Networking with **research organisations**

Networking with **other firms**

Government Benefits

Drive competitiveness

Growth of employment and entrepreneurship

Attract financial resources

Foster innovation and **tacit knowledge sharing**

Brain Gain

Create Global mindset companies

Corporate Benefits

Better networking with research organisations

Minimize the Risk and improve flexibility

Access to better support services with respect to research, technology and innovation

Attract innovative people

Access to better support services with respect to internationalisation

Access to funds for collaborative projects

But we are not just creating technology ….

… but a sustainable open innovation ecosystem

Supporting Innovation & Collaboration

Pleiades
IoT Greek Innovation Cluster

- Aims at developing & promoting IoT technological innovation through coordinated efforts of its members.
- Key members: research centers, universities, large companies, SMEs with specific expertise & start-ups, each one playing its own and significant role in the ecosystem, through a range of extended synergies.

GSRT
GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY

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Mission & Vision

- Founded on a partnership between members of Uni Systems ecosystem.
- Tapping into the spectrum of smart digital solution providers that will drive the market to scale up.
- In charge of driving the sustainable growth of IoT technologies & programmes.

Valued Ecosystem Membership

Members or potential members of the cluster are:

- Large, Small & Medium Enterprises, Start-ups across all vertical domains.
- Independent Software Vendors & Systems Integrators.
- International scientific community & networks of ICT technologies.
- Universities & research centers.
- Technology parks', Incubators.
- European, and non-European, ICT industry, SMEs, Industrial associations and networks.
- International, European, national, regional authorities & policy makers.
- The main regions and cities in Greece.
- Greek & European cities networks in and out of Europe.
- EU technology platforms' representatives.
- Other transnational consortia.
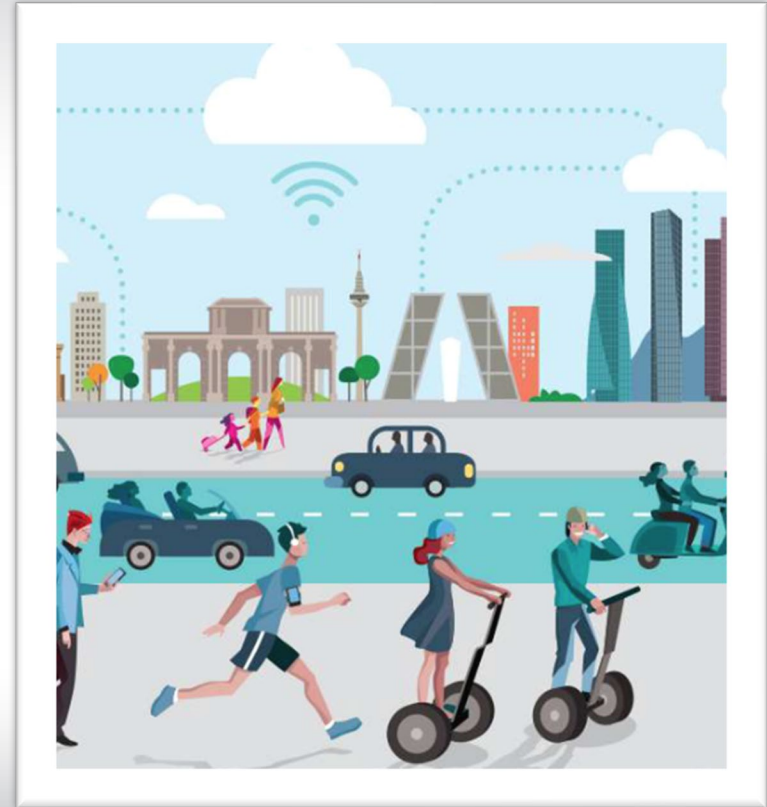
Key Points of Ecosystem Strategy

- Developing & testing new, innovative models of revenue, management & marketing for IoT sectors, such as "Smart" Services & interconnected objects.

- Enabling various sectors' professionals to gain new skills: on educational dimension and on fostering cross industry dialogue.

- Connect isolated industry specific "technology islands": common platform synergies among people from different technological sectors / ICT backgrounds.

- ICT and clusters are successful and sustainable and provide value to single participants & the overall agglomeration.

- Providing value to their members to sustain their engagement.

Turnkey Smart City Solutions for Sustainable Cities

- Creating complete, ready-to-use solutions to transform our cities into smarter, safer and more efficient, citizen-focus environments.

- Focused on design and implementation.

    The power of ecosystem

" SME's and Start-ups don't just happen in random places, SME's and Start-ups within a cluster overwhelmingly grow faster and survive longer.

Porter, Author and Harvard Business School professor

Thank you