EU WEEK FOR SUSTAINABLE AND INCLUSIVE COMMUNITIES:
THE FUTURE IS SHAFE

Empowering Startups - Tech Transfer, IP Strategy, and Funding for Smart Innovation

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SIRENE SOCIAL INNOVATION RESPONSIVE ENVIRONMENTS NETWORK | NET4 Age-Friendly International Interdisciplinary Network on Smart Healthy Age-Friendly Environments (CA19136) | SHAFE Foundation Smart Healthy Age-Friendly Environments

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GREEK SCIENTISTS SOCIETY

Theo Zacharis

Greek Scientists Society

Empowering Startups Tech Transfer, IP Strategy, and Funding for Smart Innovation

Agenda

- Startup Innovation in Today's Economy
- Innovation Products and Services for Smart Healthy Age-Friendly Environments
- Tech Transfer - From Innovation to Implementation
- Patent Strategy - Protecting Innovative Ideas
- Securing Funding - Fuelling Innovation
- Conclusion - Partnering for Success

Startup Innovation in Today's Economy

Innovation is the key driver of economic growth, fostering new industries, enhancing competitiveness, and addressing global challenges like sustainability and aging populations.

- Catalyst for Economic Growth
  - Innovation drives industries. From technology to healthcare, innovation fosters new industries and revitalises existing ones. It is crucial for long-term economic growth.
  - Competitive advantage. Companies that innovate effectively gain a competitive edge, staying ahead in increasingly saturated markets.

Startup Innovation in Today's Economy

Innovation is the key driver of economic growth, fostering new industries, enhancing competitiveness, and addressing global challenges like sustainability and aging populations.

- Sustainable Development and Social Impact
  - Eco-friendly and Smart Solutions. Innovation in sustainability and smart living technologies helps address global challenges like climate change, aging populations, and urbanisation.
  - Social Innovation. Initiatives like SIRENE and NET4Age-Friendly exemplify how innovation can solve societal challenges, creating more inclusive and sustainable communities.

Startup Innovation in Today's Economy

Innovation is the key driver of economic growth, fostering new industries, enhancing competitiveness, and addressing global challenges like sustainability and aging populations.

- Driving Global Investments
  - Attracting Funding. Investors are increasingly focused on startups that offer transformative products and services, particularly in sectors like smart healthcare and sustainability.
  - Innovation ecosystems. Collaboration among startups, academia, and industries is crucial for creating ecosystems that support high-impact innovations.

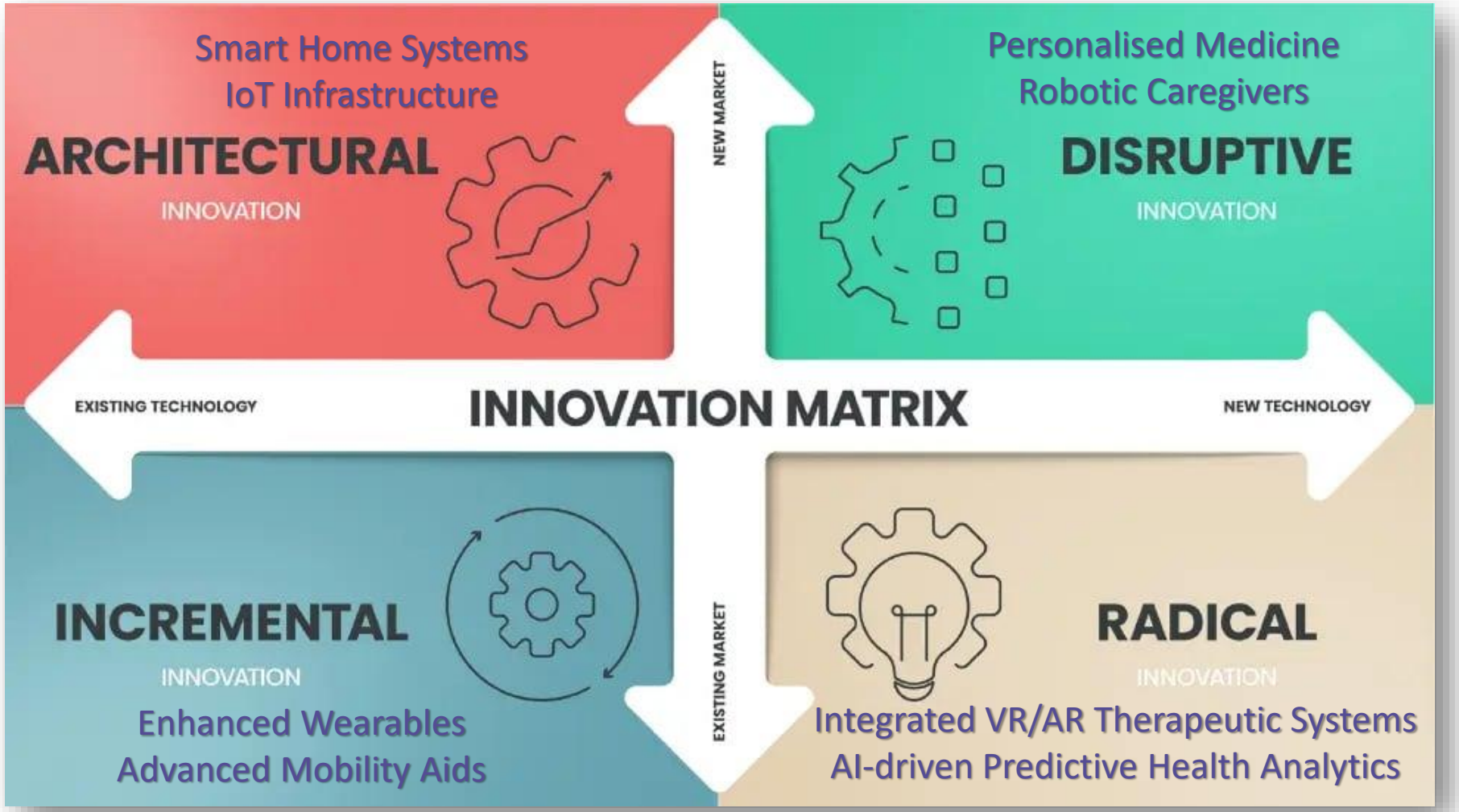
Startup Innovation in Today's Economy

Innovation matters today because it reshapes industries, creates sustainable solutions, and improves quality of life, addressing critical challenges in healthcare, urbanisation, and environmental sustainability.

- Reshaping Markets. Innovation is not just about technology; it transforms entire sectors, from healthcare to housing, creating more efficient and sustainable business models.
- Future of Work and Communities. The growth of innovation-driven sectors leads to new job creation and improves quality of life, particularly through smart and eco-friendly solutions for ageing populations and urban communities.

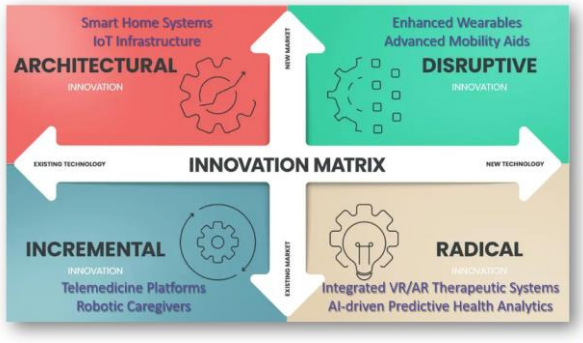
EXAMPLES

Innovation Products and Services for Smart Healthy Age-Friendly Environments



Innovation Products and Services for Smart Healthy Age-Friendly Environments

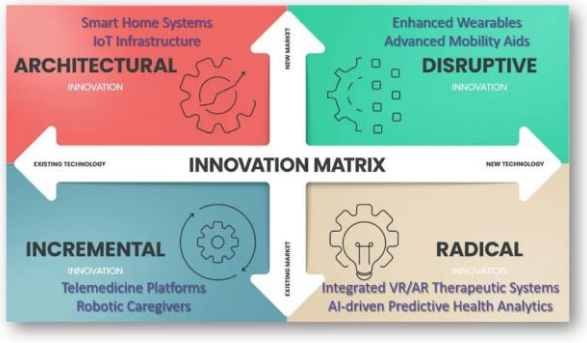
Enhanced Wearables Refines existing wearable technologies by improving features like battery life, sensor accuracy, and user interface, making them more adaptable to everyday use.



Advanced Mobility Aids Develops upon current mobility solutions (like wheelchairs or walkers) by adding advanced materials, electronic systems, or software to enhance user mobility and independence.

Innovation Products and Services for Smart Healthy Age-Friendly Environments

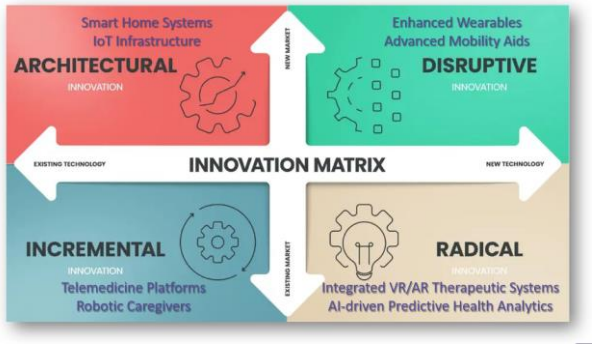
Smart Home Systems Reconfigures existing technologies to create more efficient and interconnected home environments, enhancing the functionality of traditional home setups.



IoT Infrastructure Modifies and integrates existing network and sensor technologies to improve connectivity and data sharing across various devices and platforms.

Innovation Products and Services for Smart Healthy Age-Friendly Environments

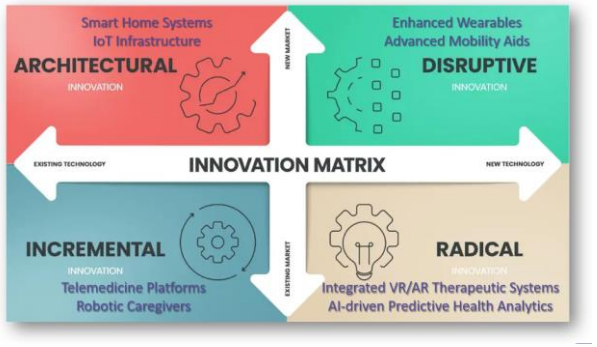
Integrated VR/AR Therapeutic Systems Employs entirely new applications of VR and AR to provide innovative treatments and rehabilitative care that were not previously possible, offering immersive therapeutic experiences.



AI-driven Predictive Health Analytics Utilizes cutting-edge AI techniques to analyse large datasets for predictive diagnostics and personalized treatment plans, fundamentally changing how healthcare data is utilised and treatments are prescribed.

Innovation Products and Services for Smart Healthy Age-Friendly Environments

Tailored Therapeutic Strategies Utilises genomic, proteomic, and other omic data to develop highly individualised treatments that are more effective based on a person's unique biological makeup, thereby improving outcomes and reducing the trial-and-error approach of conventional medicine.



Predictive Risk Assessment Enables early detection and prevention strategies by analysing comprehensive biomarker data to predict susceptibility to diseases long before symptoms manifest, shifting the healthcare focus from treatment to prevention.

Tech Transfer From Innovation to Implementation

*"Tech transfer is the process by which new technologies and inventions developed in research settings are transitioned into commercial products or services. This involves protecting **intellectual property, licensing technologies**, and often collaborating with **industry partners** to ensure that innovations achieve practical application and market penetration."*

Key Components of Successful Technology Transfer

- Intellectual Property Management. Protecting inventions through patents and copyrights to ensure innovators retain control and receive compensation.
- Commercialization Strategies. Developing business models and strategies to bring the technology to market effectively and sustainably.

Examples of Technology Transfer in Action

- University Spin-offs. Companies formed to commercialize academic research, often supported by the university's technology transfer office.
- Public-Private Partnerships. Collaborations between academic institutions and industry leaders to develop and commercialize technologies.

Challenges and Solutions in Technology Transfer

- Navigating Bureaucracy. Simplifying the process and reducing red tape to facilitate smoother transitions from lab to market.
- Funding and Investment. Securing necessary funding through venture capital, government grants, or other financial models to support early-stage developments.

Tech Transfer From Innovation to Implementation

Technology transfer mechanisms

- ✓ **Licensing Agreements** Intellectual property (IP) rights, such as patents, are licensed to companies or other entities to develop and commercialize the technology.
- ✓ **Trade secrets** Involve protecting confidential business information - such as proprietary formulas, processes, or designs - that gives a competitive advantage without publicly disclosing the innovation.
- ✓ **Spin-offs and Startups** New companies are created to commercialize technologies developed within research institutions, often involving the original inventors.
- ✓ **Collaborative Research Agreements** Joint research projects between universities, research institutions, and industry partners aimed at developing technologies with commercial potential.
- ✓ **Consulting and Advisory Services** Researchers provide their expertise to companies to help them implement or develop new technologies.
- ✓ **Public-Private Partnerships** Government bodies and private companies collaborate to bring public-funded research into the market.
- ✓ **Material Transfer Agreements (MTAs)** Legal documents allowing the transfer of tangible research materials between institutions or companies for further development.

Tech Transfer From Innovation to Implementation

In technology transfer for social entrepreneurs, the means of tech transfer often focus on creating **societal impact** and **solving social** issues. Here are additional methods that are more aligned with social entrepreneurship

- ✓ **Open Innovation and Knowledge Sharing** Sharing technology openly or through collaborative platforms, enabling others to adapt and apply innovations for social good without restrictive IP barriers. *Linux Foundation*
- ✓ **Social Franchising** Replicating successful social enterprises by transferring knowledge, processes, and technology to new locations or partners, helping scale impact-driven solutions. *VisionSpring*
- ✓ **Non-Profit Licensing** Allowing non-profit organizations to use patented technologies at little to no cost, ensuring accessibility of innovations to underserved communities. *Medicines Patent Pool (MPP)*
- ✓ **Impact Investment and Venture Philanthropy** Attracting investment aimed at both financial return and measurable social impact to help fund and scale technology-based social ventures. *Acumen Fund*
- ✓ **Capacity Building and Training** Providing local communities and entrepreneurs with the skills and resources needed to implement and adapt technologies in ways that address social challenges. *Grameen Foundation*

Patent Strategy - Protecting Innovative Ideas

Importance of Patent Strategy

- **Safeguarding Innovation** Patents protect new inventions, ensuring that innovators maintain control over their ideas and can prevent others from using, selling, or manufacturing them without permission.
- **Monetisation and Licensing** Well-managed patents allow innovators to license their technology, generate revenue, or leverage it in collaborations.

Key Elements of a Patent Strategy

- **Comprehensive Patent Coverage, Timing and Filing Strategy** Securing broad patent protection across different regions and markets to prevent competition. Filing early to establish priority, and using provisional patents strategically to buy time for further development and global filing.
- **Patent Portfolio Management** Developing a cohesive portfolio of patents to cover core technologies, improvements, and adjacent innovations, providing both offensive and defensive capabilities.

International Patent Protection

- **Patent Cooperation Treaty (PCT)** A centralised system for filing patents in multiple countries, streamlining the international patent process.
- **Regional Considerations** Different jurisdictions (e.g., US, EU, China) have varying rules and enforcement levels, so adapting patent strategy for each region is critical.

Patent Strategy - Protecting Innovative Ideas

Patents as a Competitive Tool

- **Blocking Competitors** Using patents to prevent competitors from entering key markets or developing similar technologies.
- **Cross-Licensing and Partnerships** Leveraging patent rights in negotiations to create partnerships, resolve disputes, or gain access to complementary technologies.

Patent Lifecycle and Maintenance

- **Maintenance Fees and Costs** Managing long-term costs associated with maintaining patents, and deciding which patents to keep active based on business strategy.
- **Patent Expiration Strategy** Planning for patent expiry by developing new innovations or improvements to maintain competitive advantage.

Common Pitfalls in Patent Strategy

- **Overly Narrow Patents** Focusing too narrowly on one aspect of the invention may leave room for competitors to design around the patent.
- **Geographic Gaps** Not securing protection in key markets could result in lost opportunities or exposure to competitors.

Securing Funding - Fuelling Innovation

Importance of Funding for Innovation

- **Accelerating Development** Adequate funding enables the rapid development and scaling of new technologies, helping innovators bring their ideas to market faster.
- **Sustaining Growth** Securing continuous funding is crucial for startups and innovators to maintain research, development, and commercialization efforts.

Key Funding Sources

- **Grants and Public Funding** Government programs, research councils, and international bodies (e.g., Horizon Europe) provide non-dilutive funding for early-stage innovation.
- **Venture Capital (VC) and Angel Investors** Private equity funding for high-growth potential startups, often in exchange for equity.
- **Corporate Partnerships** Collaborations with established companies that invest in or co-develop new technologies, often providing both financial and strategic support.
- **Crowdfunding** Platforms like Kickstarter or Indiegogo allow innovators to raise capital from the public, particularly for consumer-focused products.

Securing Funding - Fuelling Innovation

Stages of Funding

- **Seed Funding** Initial funding used to validate the idea, develop a prototype, and conduct market research. Often sourced from personal funds, angel investors, or early grants.
- **Series A, B, C** Venture capital funding rounds that help scale the business, refine products, and grow market presence.
- **Debt Financing** Loans or lines of credit that allow businesses to grow without giving up equity, but require careful financial management.

Building a Strong Funding Proposal

- **Clear Value Proposition** Demonstrate the innovation's unique value, market potential, and impact in solving real-world problems.
- **Business Plan and Financial Projections** Provide detailed projections of revenue, costs, and growth potential to show the path to profitability.
- **Intellectual Property (IP) Strategy** Highlight how IP, such as patents, adds value and protects competitive advantage.

Securing Funding - Fuelling Innovation

Strategic Considerations in Securing Funding

- **Choosing the Right Investors** Aligning with investors who bring not only capital but also expertise, networks, and strategic support.
- **Dilution and Equity Considerations** Understanding how each funding round affects ownership and long-term control of the business.
- **Milestone-Based Funding** Breaking down funding into stages, tied to achieving key development or commercial milestones, to reduce risk for investors.

Risks and Challenges

- **Over-reliance on External Funding** Depending too heavily on external funding can lead to loss of control and pressure to deliver rapid growth.
- **Competition for Capital** With many startups vying for limited funds, standing out requires a strong, differentiated pitch and proof of concept.

Conclusion - Partnering for Success

Collaborative Opportunities with bioGLOT Ventures & Greek Scientists Society

Shared Goals and Expertise

- **Intersecting Verticals** Leveraging our mutual focus in IT and biomed sectors to create synergistic technology transfer opportunities.
- **Innovation and Strategy Alignment** Aligning our strategic objectives to accelerate technology commercialization and market entry.

Partnership Opportunities

- **Joint Ventures and Spin-offs** Collaborating to establish startups or spin-offs that can benefit from combined expertise and resources.
- **Cross-Market Expansion** Utilizing bioGLOT's network to bridge ecosystems between the Greek, Cypriot, and Cambridge communities, enhancing market access and resource sharing.

THANK YOU!

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bioGLOT Ventures

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Collaborative Opportunities with bioGLOT Ventures & Greek Scientists Society

Resource and Knowledge Sharing

- **Innovation Workshops and Agile Transformation** Participating jointly in sessions that foster innovation and implement agile methodologies to improve project outcomes.
- **Grant Writing and Fundraising** Cooperating in securing government grants and fundraising activities, leveraging bioGLOT's expertise to enhance chances of success.

Implementation and Growth

- **Recruitment and Team Development** Sharing resources for recruiting top talent and developing teams that are well-equipped to handle new ventures.
- **Continuous Improvement Practices** Engaging in continuous assessment and adaptation using agile practices like Scrum or Kanban to refine technology transfer processes.

Long-term Strategic Alliance

- **Mutual Growth and Learning** Building a relationship that nurtures mutual growth, learning, and adaptation to evolving technological landscapes and market needs.

Our Methodology

bioGLOT Ventures

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1

Initial Assessment

Current State Analysis: A thorough assessment of the company's strategy, organization, systems, and infrastructure to identify key areas of improvement and innovation potential.

2

2. Identifying Needs and Outcomes

Using **Innovation Due Diligence (IDD)** to pinpoint critical areas for innovation and prepare the ground for deploying new solutions, ensuring alignment with desired outcomes.

3

3. Strategic Implementation

Leveraging **Agile** methodologies with continuous evaluation and refinement ensure that the implementation stays aligned with business objectives and can dynamically respond to challenges or opportunities.

4

4. Ongoing Support:

Providing scouting and support for **grant applications**, **securing funding** from investors and VCs, developing **AI-driven solutions**, and facilitating **innovation practices** for sustainable success.

Our Methodology

Our methodology begins with a comprehensive **Current State Analysis** to identify key challenges and opportunities within the organization. We then conduct **Innovation Due Diligence** (IDD), ensuring alignment with strategic goals. Our **Agile Implementation** process uses continuous improvement frameworks. Finally, we provide Continuous Support, offering innovation curation, AI-driven solutions, and strategic advice to foster long-term growth and sustained innovation. This approach ensures that strategies are adaptive and tailored to client needs for maximum impact.

Services

•**Business planning and advisory** – pre-acceleration and acceleration growth programs, preparation of business plans for spin-off or start-up companies considering market, positioning, regulatory, development, IP strategy, team and financials

•**Technology and other tie-ups, spin-offs, joint ventures, cooperative agreements, licensing, technical meetings, and information dissemination**

•**Development of investor pitch**

•**Development of Proof of Concept (PoC) and/or Minimum Viable Product (MVP)**

•**Investment attraction strategy** – contact potential private investors or VCs and assistance in the fundraising and negotiation for early-stage capital raising and investor relations

•**Interim CEO** – leading the team until identifying and hiring a full-time CEO or Board observer when necessary

•**Definition of the licensing strategy** – in-licensing and out-licensing activities, Technology Transfer, R&D commercialization

•**Networking with support eco-systems players** – innovation hubs, R&D centres, technology parks, business angel networks, science parks and business support agencies – to build innovation ecosystems in national and/or international scale

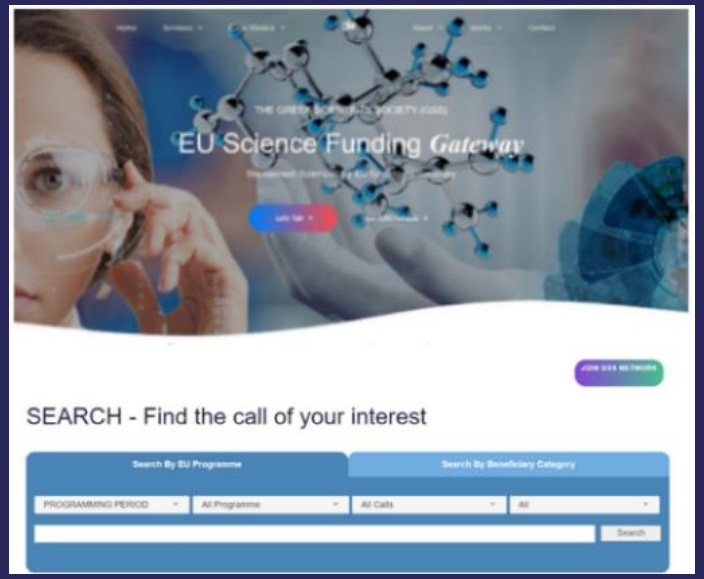
•**Public Grants and EU Framework Programmes for Research and Development and government subsidies (e.g. UK Innovation) for commercialisation of innovative ideas**

•**Development and validation of the Business Model**

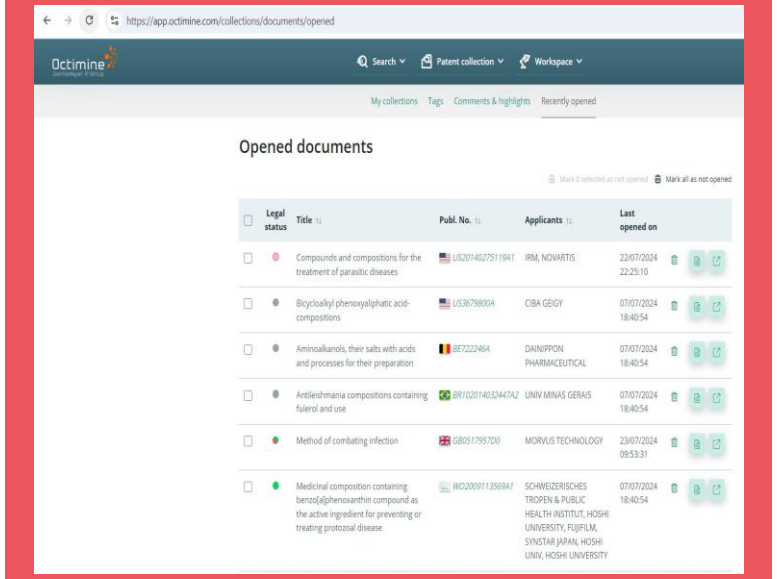
•**Implementation, Team Formation**

Our tools

Grant Applications



Patent Strategy



Investors database