**Blue Ocean Strategy definition:**

Blue Ocean Strategy pursues differentiation and low cost simultaneously to create new market space and unlock new demand. It centers on establishing uncontested market space – blue oceans – where competition becomes irrelevant, rather than battling rivals in existing markets.

Kim, W. C., & Mauborgne, R. (2005)

**BEAGLE Project description:**

We aim to bridge the gap between academia and industry by applying Blue Ocean Strategy to knowledge transfer. Through co-creation experiments, BEAGLE creates new connections between researchers and businesses who would not naturally meet, transforming research into real-world impact.

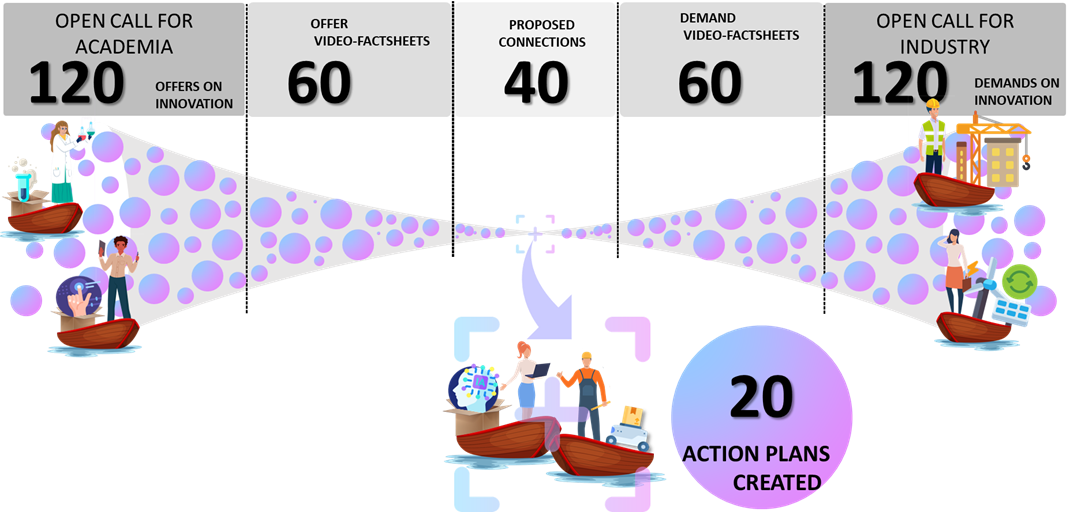
**BEAGLE's 3-Phased Methodology and Innovation funnel:**

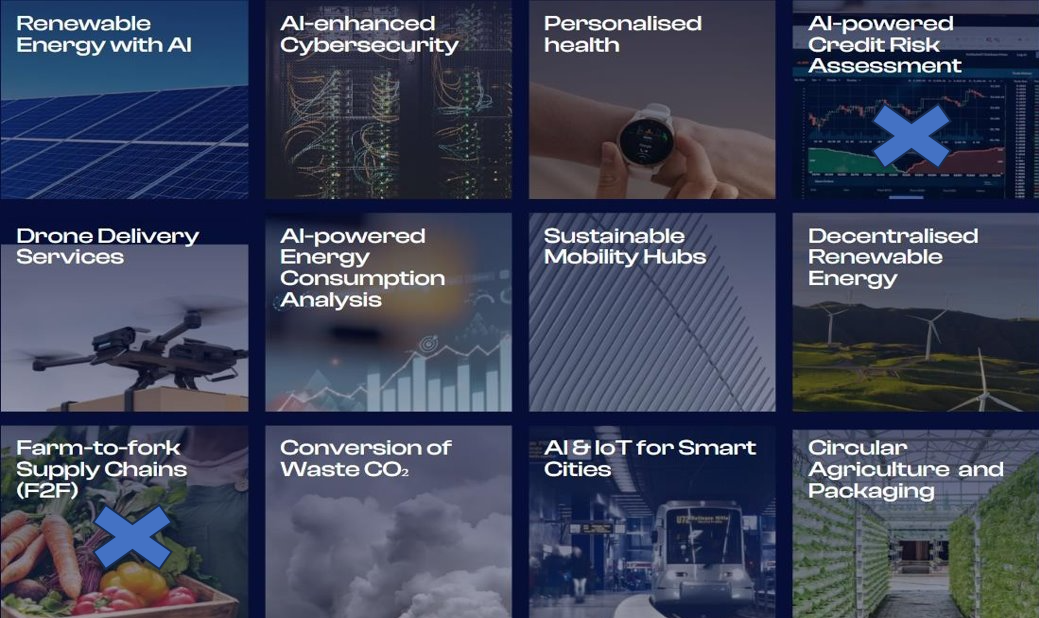
**[Phase I]** Discover Opportunities: capturing industrial innovation demands.

**[Phase II]** Co-Create Knowledge Valorisation: realizing alignment between academic resources (innovation supply) and industrial demands.

**[Phase III]** Consolidate Knowledge Valorisation: consolidating knowledge valorisation and formulating implementable A-I cooperation action plans.

This 3-Phased methodology operates through an Innovation Funnel approach that systematically channels participants from open call recruitment to implementation. The funnel progressively filters 120 industry demand, and 120 academic innovation supply offers into 60 Video-Factsheets on each side, then facilitates A-I matching to create 40 strategic connections, finally advancing to 20 action plans.





**Innovation Demand from BEAGLE Industry Network:**

|  |  |  |
| --- | --- | --- |
|  | **Market niche name** | **Innovation demand description** |
| **1** | AI & IoT for Smart Cities | Practical, technology-based solutions to improve urban living by making cities safer, more accessible, and more sustainable. Specifically, there is demand for autonomous mobility and logistics, such as optimization tools for vehicles, accessibility solutions, including AI tools to standardize accessibility data across cities, and increased safety, and operational efficiency, including analytics for better urban decision-making using AI. |
| **2** | AI-enhanced Cybersecurity | Advanced AI solutions that enable organizations to adopt AI technologies safely and efficiently. The demand includes AI Readiness Navigator tools to assess risks, environmental and social impacts; automated cybersecurity agents designed for specific purposes to improve efficiency, adaptability, and cost-effectiveness; and solutions informed by psychology, human-computer interaction, and open-source intelligence. |
| **3** | AI-powered Energy Consumption Analysis | Innovative AI applications in energy and building efficiency. Industry is looking for tools to estimate the lifespan and performance of second-life batteries, as well as intelligent, low-cost building management solutions that reduce energy consumption. |
| **4** | Circular Agriculture and Packaging | Solutions that combine AI, sustainability, and resource efficiency. This includes data analytics using AI for prediction and decision-making, circular economy and waste management technologies such as recycling and composting, renewable energy and efficiency solutions for buildings and agriculture, and sustainable agricultural practices including advanced plant propagation, algae and spirulina cultivation, and eco-friendly fiber production. |
| **5** | Conversion of Waste CO₂ | Innovative technologies to capture and repurpose carbon dioxide, turning it into valuable materials, fuels, and chemicals. The industry is seeking, among others, open-source methods to reduce emissions in raw-materials production, technologies that convert CO₂ into low-carbon fuels, biological approaches that use CO₂ to generate fuels or chemicals, and transforming CO₂ into products like humic acid for carbon capture and storage. |
| **6** | Decentralised Renewable Energy | Advanced solutions for decentralized renewable energy and sustainable industrial processes. In particular, the market is looking for energy management automation for smarter manufacturing, energy-efficient production methods to reduce material use and carbon footprint, thermal and chemical storage systems for heat and hydrogen, photocatalytic technologies for environmental cleaning, and certification of bio-based materials to replace high-emission alternatives. |
| **7** | Drone Delivery Services | Technologies and infrastructure for urban drone delivery and passenger services. This includes AI decision support tools for cargo and passenger drone services, high-tech landing points with private, corporate, or public access, fully automated platforms for flight planning, routing, programming, and regulatory compliance, as well as automated drone delivery stations integrating AI algorithms, neural networks, and electrochemical sensors for applications in agriculture, IT, and logistics. |
| **8** | Personalised Health | Personalized health technologies that improve prevention, monitoring, and treatment for individuals. Industry demands within this niche include AI assisted injury prevention and rehabilitation platforms for athletes, mental health and cognitive longevity tools for the elderly, patient-centered monitoring and alert systems, and AI-assisted medical screening software. Additionally, there is demand for personalized support during menopause, bioactive nutritional supplements, validated regenerative nutrition protocols, AI-driven employee wellness solutions, and integrated hospital quality management platforms to streamline care and compliance. |
| **9** | Renewable Energy with AI | Solutions that optimize recycling of mixed plàstics into products. The demand includes developing and implementing industrial-engineering and mechanical automation systems to efficiently scale thermoforming processes for producing plastic boards from mixed plastic feedstock. |
| **10** | Sustainable Mobility Hubs | Development of platforms for shared mobility and urban micro-mobility optimization. The demand focuses on creating peer-to-peer vehicle sharing a platform connecting private car owners with individuals seeking short-term vehicle access, and predictive algorithm development, prototyping smart telematics sensors for real-time data, and research on social and environmental impacts. |