



The AI Data Robotics
Association

AI, Data and Robotics
Association

All about Adra

adr-association.eu

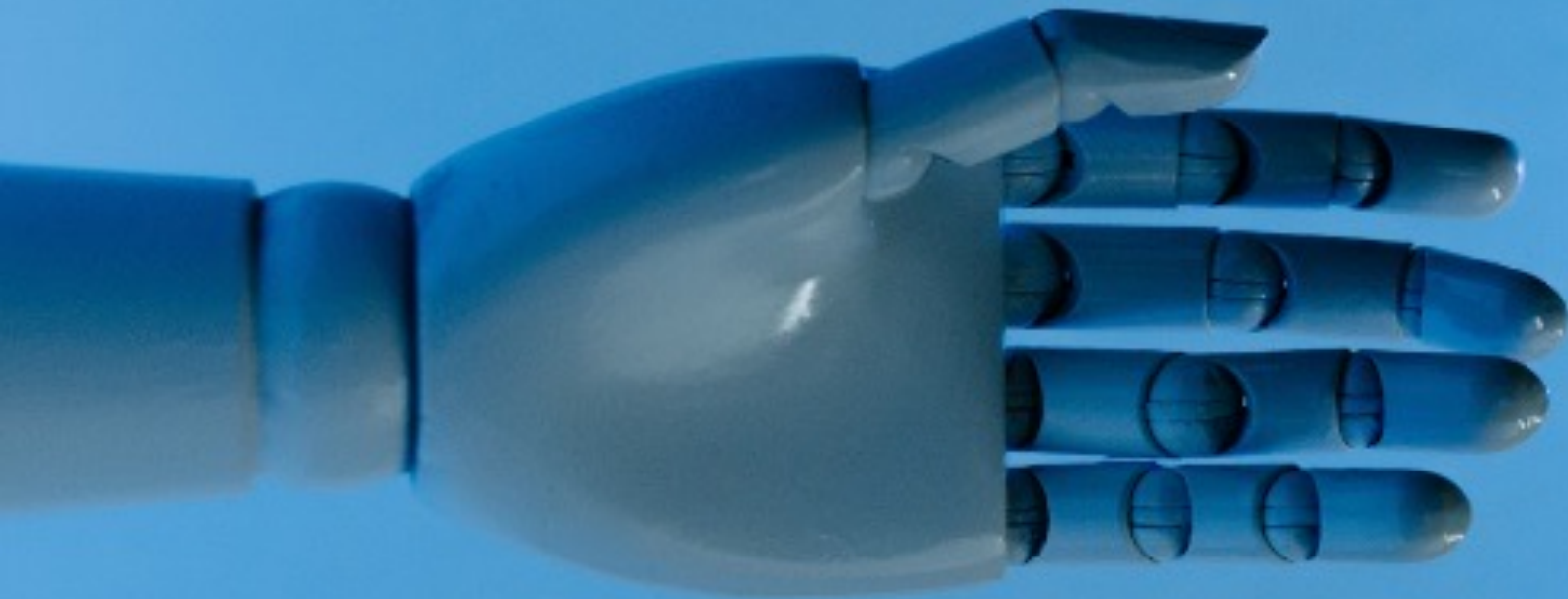
A joint initiative by:



CLAIRE

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The AI Data Robotics
Association

Welcome

Overview

- **Introduction**
- **Objectives and Approach**
- **Organisation and Governance**
- **Overview of Membership (benefits, formulas, status)**
- **European AI, Data and Robotics– a call for action**

The AI, Data and Robotics partnership (2021-2030)

Co-programmed partnerships in Horizon Europe



European Commission
Public Side

**Co-Programmed
Partnership**

Adra Association
Private Side



The MOU signed between Adra and the European Commission:

- Up to **1.3** billion euros of public investment by the European Commission (through Horizon Europe)
- Up to **1.3** billion euros of private investment through Adra for the period 2021 – 2030

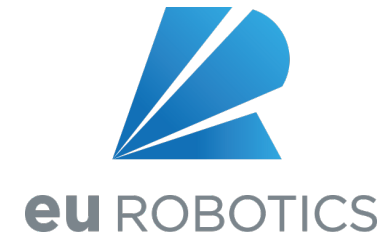


The AI Data Robotics
Association

A Joint Initiative



by
CLAIRE



Join Us!

www.adr-association.eu

General Objectives of the ADR Partnership and Adra



Secure European's sovereignty over AI, Data and Robotics technologies and knowhow

Establish European leadership in AI, Data and Robotics technologies with high socio-economic and environmental impact

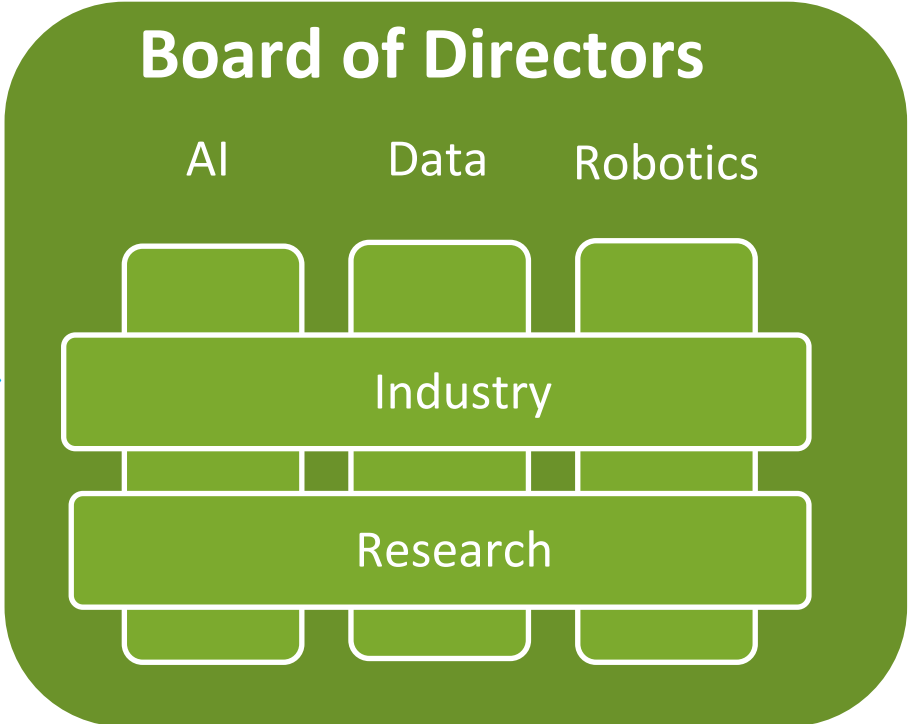
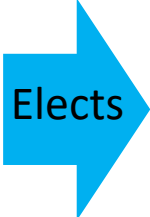
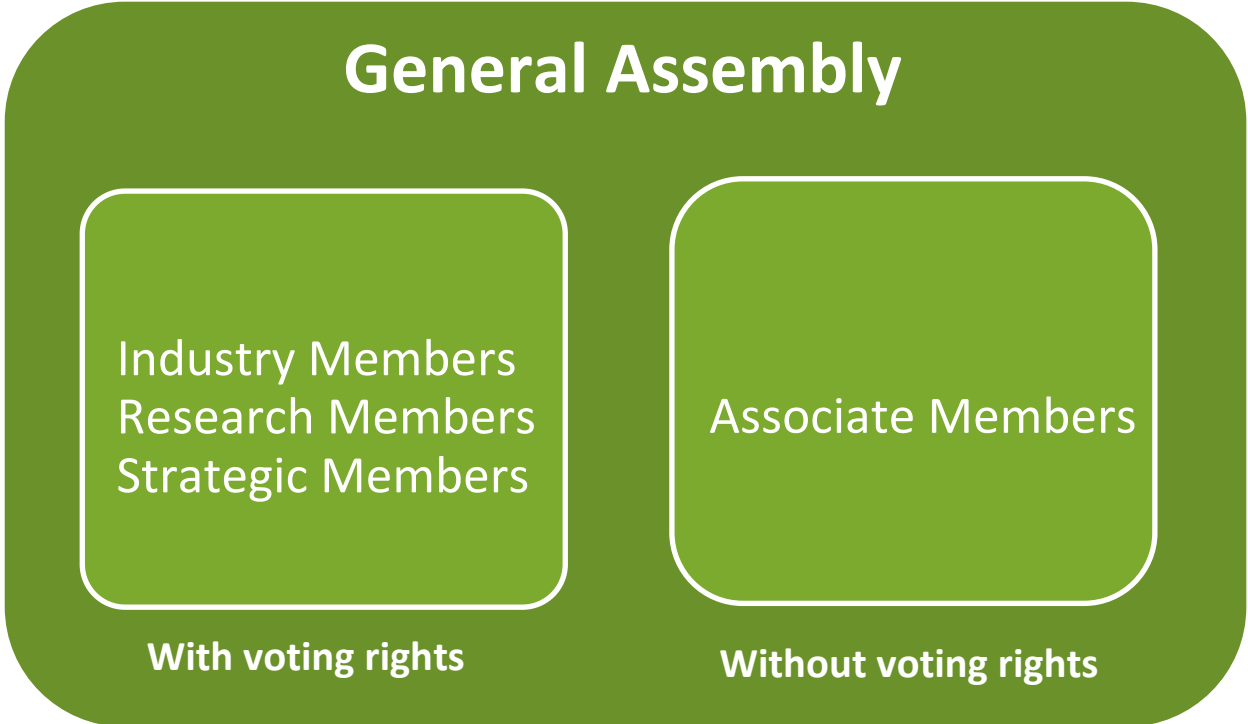


Reinforce a strong and global competitive position of Europe in AI, Data and Robotics

Adra's approach to European AI, Data and Robotics

- Leverage existing **European strengths** in AI, Data and Robotics
- **Openness** and **inclusiveness** are essential to ensure success
- A **broad dialogue** is essential for the European innovation eco-system (Start-Ups, SMEs, Large Industry and Research)
- Safeguard **balance** and **representation** between constituences and industry/research
- Build the AI, Data and Robotics eco-system on **existing** stakeholder communities.
- Ensure representation of **all** important stakeholders including start-ups/scale-ups, SMEs, regional ecosystems

General Assembly and Board of Directors



President

Secretary General

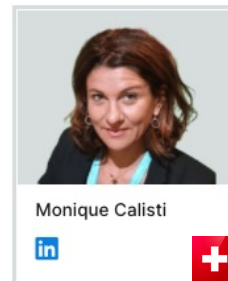
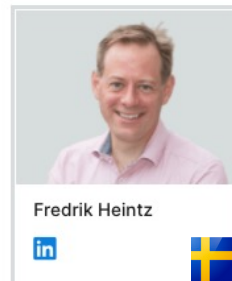
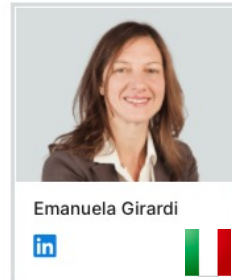
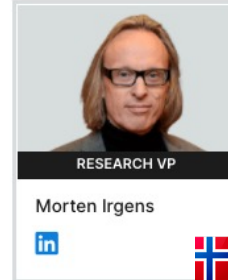


President and Founding Board

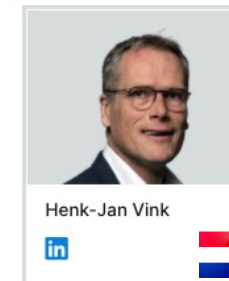
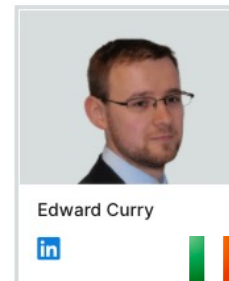
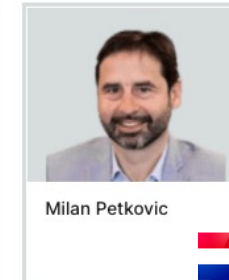
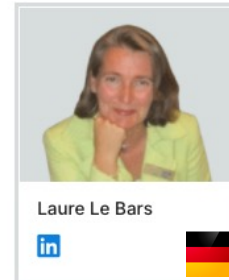
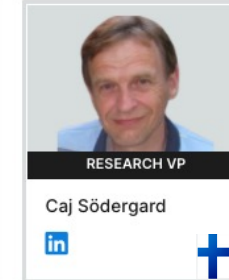
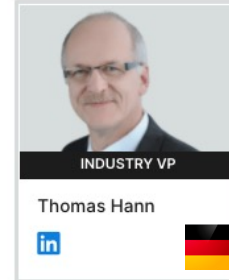
PRESIDENT



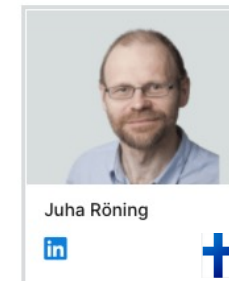
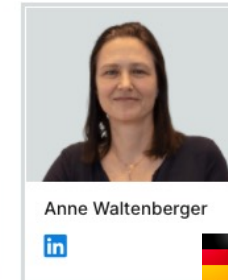
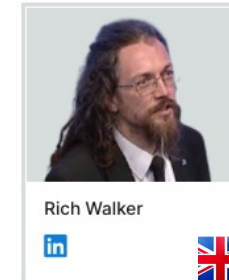
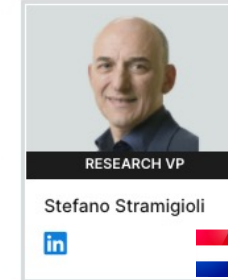
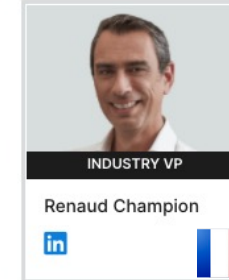
AI



DATA



ROBOTICS



The Adra Office is supported by
BDVA, CLAIRE Paris/Inria and
euRobotics/University of Twente.

Topic Groups

- FO proposes their group
- BoD mandates
- Chair continues



- Member proposes
- BoD proposes
- Group selects Chair



- BoD proposes
- BoD selects Chair



Deliverable



Adra - Partnership – Coordination & Support Action (CSA)



European Commission
Public Side

**Co-Programmed
Partnership**

Adra Association
Private Side



- Adra-e CSA project 2022-24**
- Supports Adra Association and Partnership

Adra Status – Chronology and Milestones 1/2

- 
- First Board meeting - April 2021
 - Office setup - April 2021
 - **Founding of the association** - May 2021
 - Election of President Marina Bill - June 2021
 - **Signing of MoU with the EC** - June 2021
 - InfoDay organised in collaboration with EC and IDEAL-IST – July 2021
 - Initial website launched (www.adr-association.eu) and social media (LinkedIn, twitter)
 - Start Bi-Weekly BoD meetings, bi-Weekly VP meetings (+ 45 minutes EC) – August 2021
 - GA (between founding members) – October 2021
 - Launch Event – November 2021

Adra Status – Chronology and Milestones 2/2

- Open for members – December 2021
 - Shaping WP23-24 with EC – February – March 2022
 - Exchange with National delegates and NCPs – today
 - Periodic Welcome Event – starting May 17th
-
- Infoday with EC – 16/17 June (to be confirmed)
 - **General Assembly** – Monday June 20th

Ongoing sub-committees (by the BoD) :

- Communication and Marketing
- Adra Strategy and Vision
- Setup of task-forces
- Regulations and Finance
- Recruitment of Secretary General

Adra Status – Chronology and Milestones 2/2

- Open for members – December 2022
 - Shaping WP23-24 with EC – February – March 2022
 - Exchange with NCPs – Ongoing
-
- Periodic Welcome Event – starting May 17th
 - Infoday with EC – June
 - **General Assembly** – After 1st year (when sufficient members)

Ongoing sub-committees (by the BoD) :

- Communication and Marketing
- Adra Strategy and Vision
- Setup of task-forces
- Regulations and Finance
- Recruitment of Secretary General

Membership Benefits 1/2

- Access to a large network of ADR stakeholders (Industry, Research and policy makers). This facilitates match-making to enter e.g. EU project consortia
- Impact on EU research programs. As a unique contractual partner to EC, Adra is involved in writing the research programs of Horizon Europe concerning AI, Data and Robotics
- Participate in the authoring of the Strategic Research, Innovation and Deployment Agenda (SRIDA)
- Coordinated response through position documents and white papers to consultations, and policy documents
- Improved visibility at EU-level

Membership Benefits 2/2 *

- Propose candidates to the Board of Directors
- Voting right in the General Assembly
- Lead and participate in topic groups and task forces

* for industry and research members. Slightly different rules for strategic and associate members

Adra asbl: Types of Membership

Members with
voting rights

Industry Members

- Large companies
- Mid-Caps
- Small and Medium Enterprises (“SME”) and Start-ups

Research Members

- Research and Technology Organisations (RTO)
- Universities, university colleges and university departments and laboratories or research groups of universities engaging in research, innovation and education (HES)

Strategic Members

- Not-for-profit organisations having their own members and whose main objectives are of essential value for the Purpose of the Association

Members without
voting rights

Associate Members: trade unions, non-governmental organisations, regional clusters, etc. and other stakeholders not falling in the Member categories above

Annual membership Fees

Type of Organisation	Description (total number of employees)	Annual fee	Maximum Discount if member of Founding Organisations
Large Enterprise	>3000 persons employed	10,000.00 €	5,000.00 €
Mid-caps	250 – 3000 persons employed	5,000.00 €	2,500.00 €
SMEs	1- 249 persons employed	2,000.00 €	1,000.00 €
Research and Academia	>= 50 employees	2,000.00 €	1,000.00 €
Small research entity	<50 employees	500.00 €	250.00 €
Strategic members	Any size	3,000.00 €	NA
Start-ups	Any size (3 years)	250.00 €	125.00 €
Others	Any size	500.00 €	250.00 €

How to apply

STEP 1: Download the template of the Adra Membership Application form from the Adra website www.adr-association.eu

STEP 2: Send an electronic copy of the Adra Membership Application Form filled in and duly signed to membership@adr-association.eu

STEP 3: Your application will be reviewed by the Adra Secretary General / Office that will inform you if any modifications or additional information needed.

STEP 4: The Board of Directors reviews the application and decides on granting the temporary membership status.

STEP 5: The General Assembly grants the final membership status upon proposal of the BoD

Do you need any support? Send an email to secretary-general@adr-association.eu

Get in touch



secretary-general@adr-association.eu



www.linkedin.com/company/adr-association



adr-association.eu





Innovate
UK

Welcome





Canada GBIP

Trias Gkikopoulos

Innovation Lead AI & ML

trias.gkikopoulos@iuk.ukri.org +44(0) 7717891913



Benefiting everyone through knowledge, talent and ideas

UK Research and Innovation brings together the 7 Research Councils, Innovate UK and Research England.

As part of UK Research and Innovation, Innovate UK drives productivity and economic growth by supporting businesses to develop and realise the potential of new ideas including those from the UK's world-class research base.




**UK Research
and Innovation**

Delivering with Impact

Investment of
£4.6bn
since 2007



Industry match funding taking the total value of projects above



£7.5bn

Up to
£32.2bn
in added value to the economy



Up to
£7
for every £1 we've invested



We've funded over
15,000
projects




11,800
unique organisations involved



9 jobs
at each organisation involved



More than
100,000
jobs created since 2007



Industrial Strategy Challenge Fund: Grand Challenges



Ageing society

- Medicines manufacturing
- Data to early diagnosis and precision medicine
- Healthy ageing
- Accelerating detection of disease



AI and Data Economy

- Audience of the future
- Quantum technologies
- Next generation services
- Commercialising quantum technologies
- Digital security by design



Future of mobility

- Faraday battery challenge
- Robotics in extreme environments
- Future flight
- Driving the electric revolution



Clean growth

- Prospering from Energy revolution
- Low Cost Nuclear
- Transforming construction
- Transforming food production
- Manufacturing made smarter
- Smart sustainable plastic packaging
- Industrial decarbonisation



UK Research
and Innovation



Innovate
UK



Grand Challenge: **AI and the data-driven economy**

- Data underpins the economy, and artificial intelligence (AI) provides the power needed to generate insight and boost productivity across all sectors.



UK Research
and Innovation



Innovate
UK

AI strategic delivery partners

- **Department for Digital, Culture, Media & Sport**



- Office for Artificial Intelligence
- Centre for Data Ethics and Innovation



- **Alan Turing Institute**

The Alan Turing Institute

- **UKRI**

- EPSRC

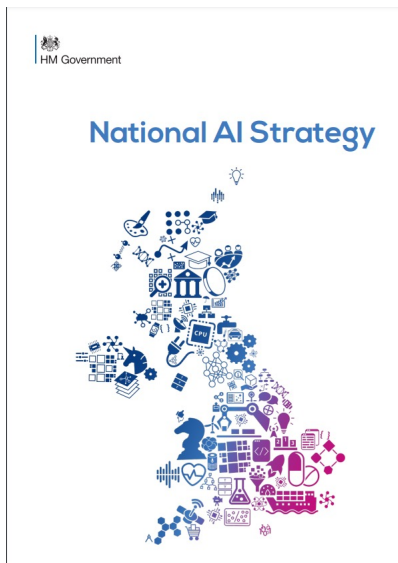


- Innovate UK



■ National AI Strategy

UK National AI Strategy



Pillar 1: Investing in the long term needs of the AI ecosystem	Pillar 2: Ensuring AI benefits all sectors and regions	Pillar 3: Governing AI effectively
A growing UK supplier base	Increased diversity in applied AI	Certainty for the UK AI ecosystem
Reduced competition for AI skills	Wider AI adoption in industries & regions	Improved public trust in AI
New AI scientific breakthroughs	Greater UK AI exports	Increased responsible innovation
Greater workforce diversity	Public Sector as exemplar for AI procurement & ethics	UK maintains its position as a global leader in AI
Applied AI technologies to new use cases	Greater public value for money	
Increased investment in UK AI companies		

September 2021

Government activity in this strategy and over the next 10 years

Engineering and Physical Sciences Research Council
 Innovate UK

The Alan Turing Institute

Centre for Data Ethics and Innovation

Office for Artificial Intelligence

AI core priority themes

- Trust

Centre for Data Ethics and Innovation

- Regulation

The Alan Turing Institute



bsi.
NPL
National Physical Laboratory

- Skills


Department for Culture Media & Sport

- 2,000 AI & data science conversion courses (£23 million)
- Turing AI Fellowships (£46 million)
- 1,000 AI PhDs CDTs (£100 million)

AI core research priorities

Innovation, Adoption & Diffusion

Supporting the development of the UK's AI Sector and the Adoption of AI Across Sectors.

Delivering immediate and near-term impact in AI industry and broader sector adoption of AI via innovation programmes

Challenge/Mission AI

Bringing the potential of AI to bear on societal, economic, and environmental challenges, with a particular focus on key pressing challenges where we have existing strength (health), where there are pressing needs (net zero), or where basic capability development is critical to sovereign capability (AI for Security and Defence and Government), and opportunities which only UKRI will deliver (AI for science).

New AI Capabilities

Building new capabilities and next generation AI technologies the knowledge, tools and techniques that solve the future challenges in AI that will keep the UK ahead of the game intellectually and will attract industry to and keep it in the UK.
Developing AI that is sustainable, interacts differently with humans, and can work with challenging (small, sparse, distributed) data sets

Supporting the environment for AI

Supporting collaborative ecosystems spanning basic and mission driven AI, skills, and innovation

Building pools of skilled people at all levels to fuel UK academia and industry

Seeking to prevent access to skills, data, and infrastructure becoming barriers to AI research and innovation

Responsible Trustworthy AI

Building the new technical and sociotechnical capabilities needed for responsible trustworthy AI

Integrating understanding of the societal impacts and implications of technology into its development

Leading the way in research informed regulation and standards

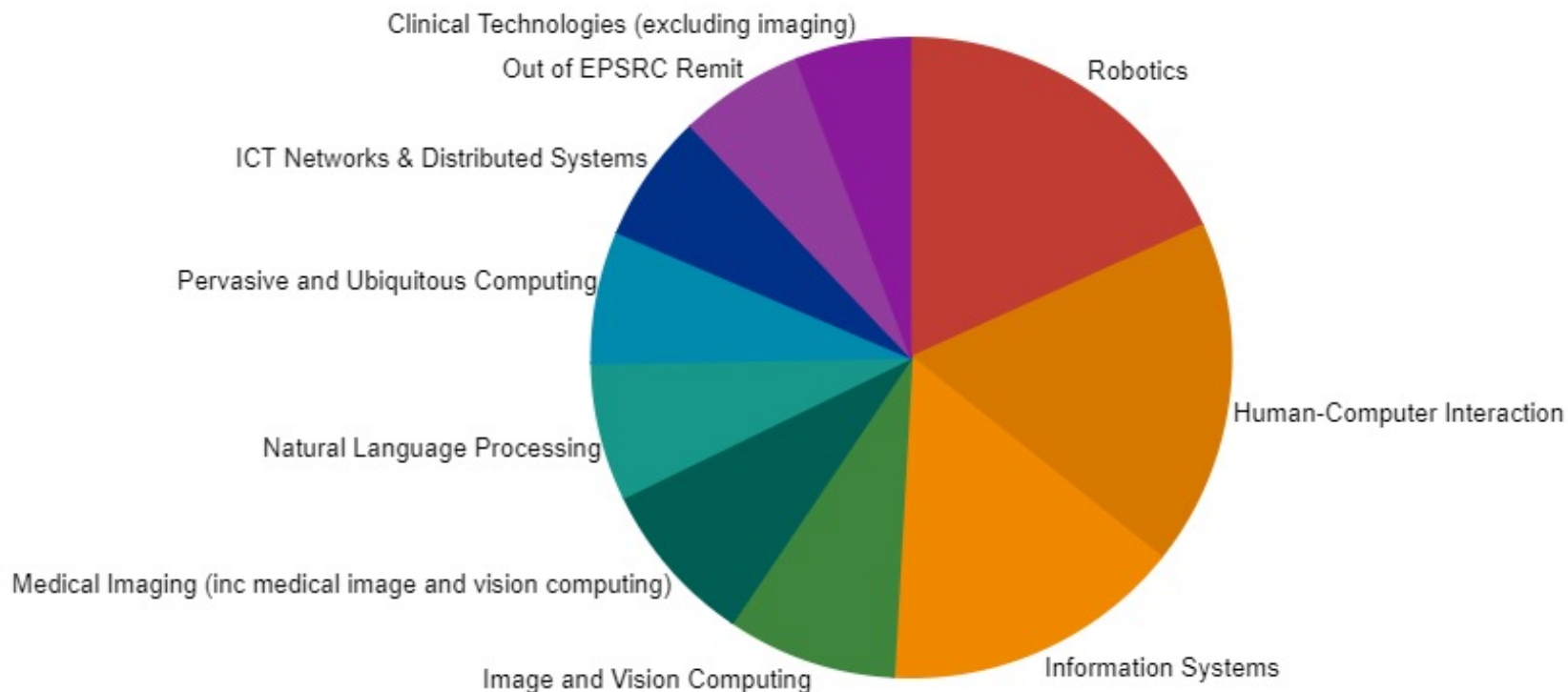
Connectivity across the AI ecosystem

Enabling convening and connectivity across the UK AI research and innovation landscape

Building on the leadership role of the Alan Turing Institute as the National Centre for AI and Data Science

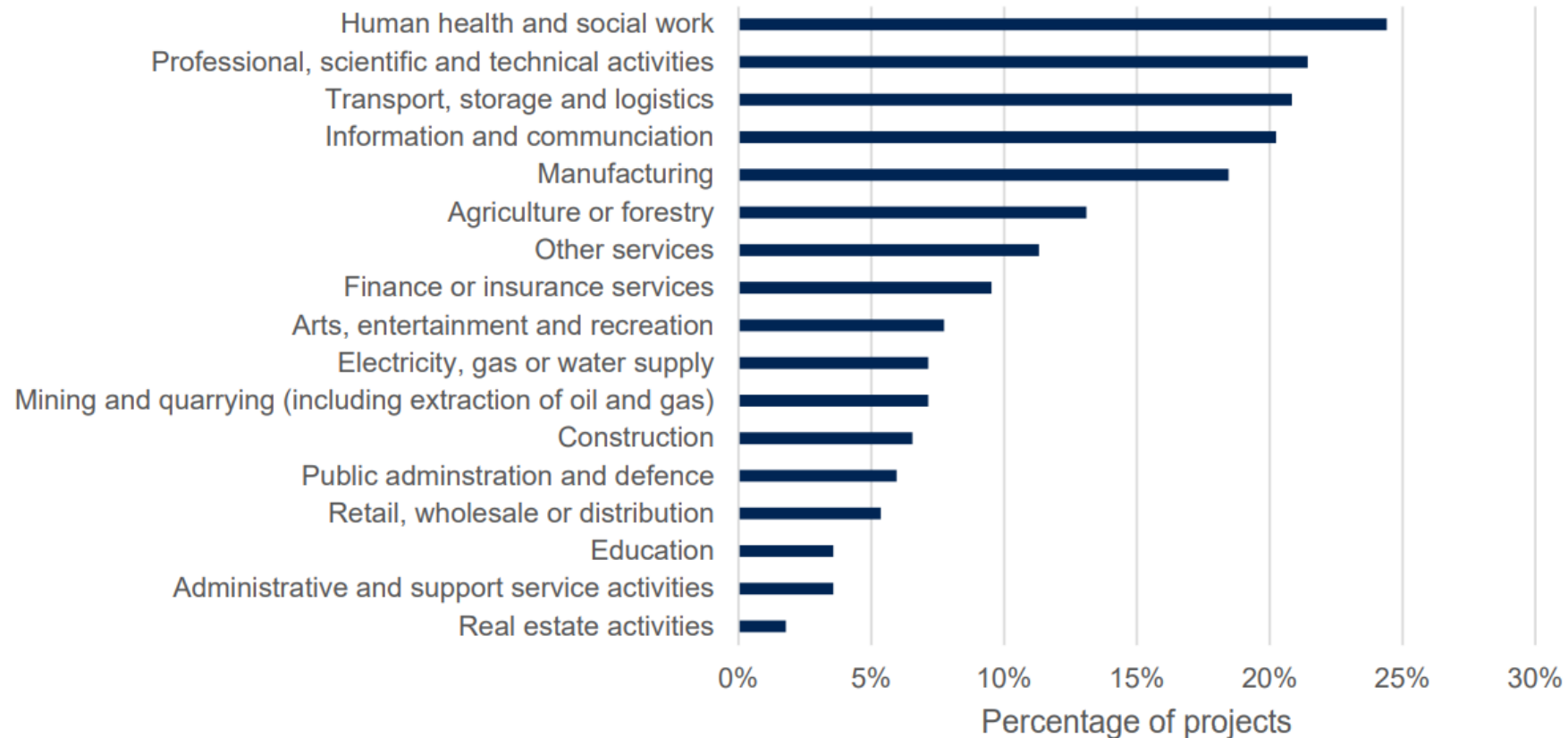
- Thematic areas of EPSRC Investment in AI

AI core research areas

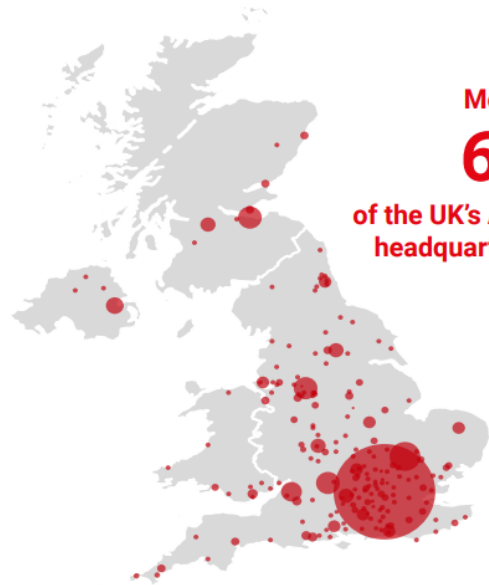


- Innovate UK invested £323m (2005-2020) in AI

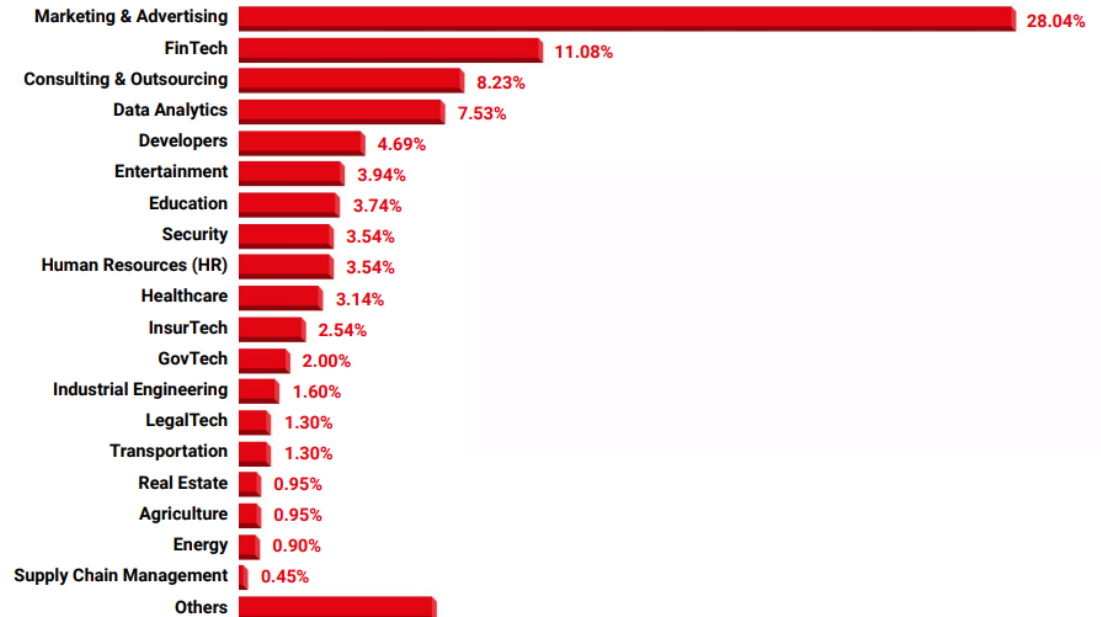
AI Recent investment



AI Landscape



More than **65%** of the UK's AI companies are headquartered in London



Artificial Intelligence Industry in the UK 2018

£1.6bn

600

1,000

Artificial Intelligence Industry in the UK 2021

£3.1bn

1,500+

2,000+

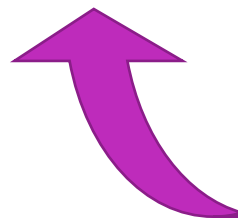
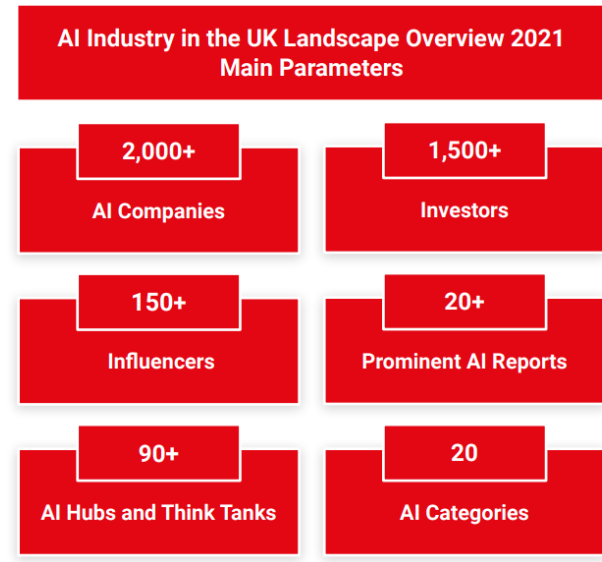
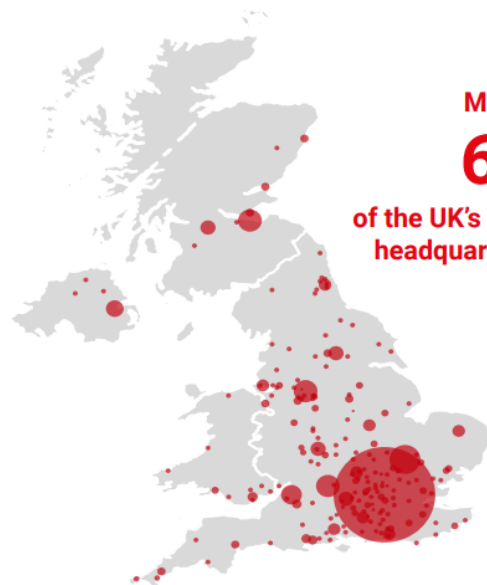
+93%
Annual funding of the UK's AI Industry

+154%
Total Number of Investors in AI Industry

+ more than 1000
New AI Companies



AI Landscape



Artificial Intelligence Industry in the UK 2018

£1.6bn

600

1,000

Artificial Intelligence Industry in the UK 2021

£3.1bn

1,500+

2,000+

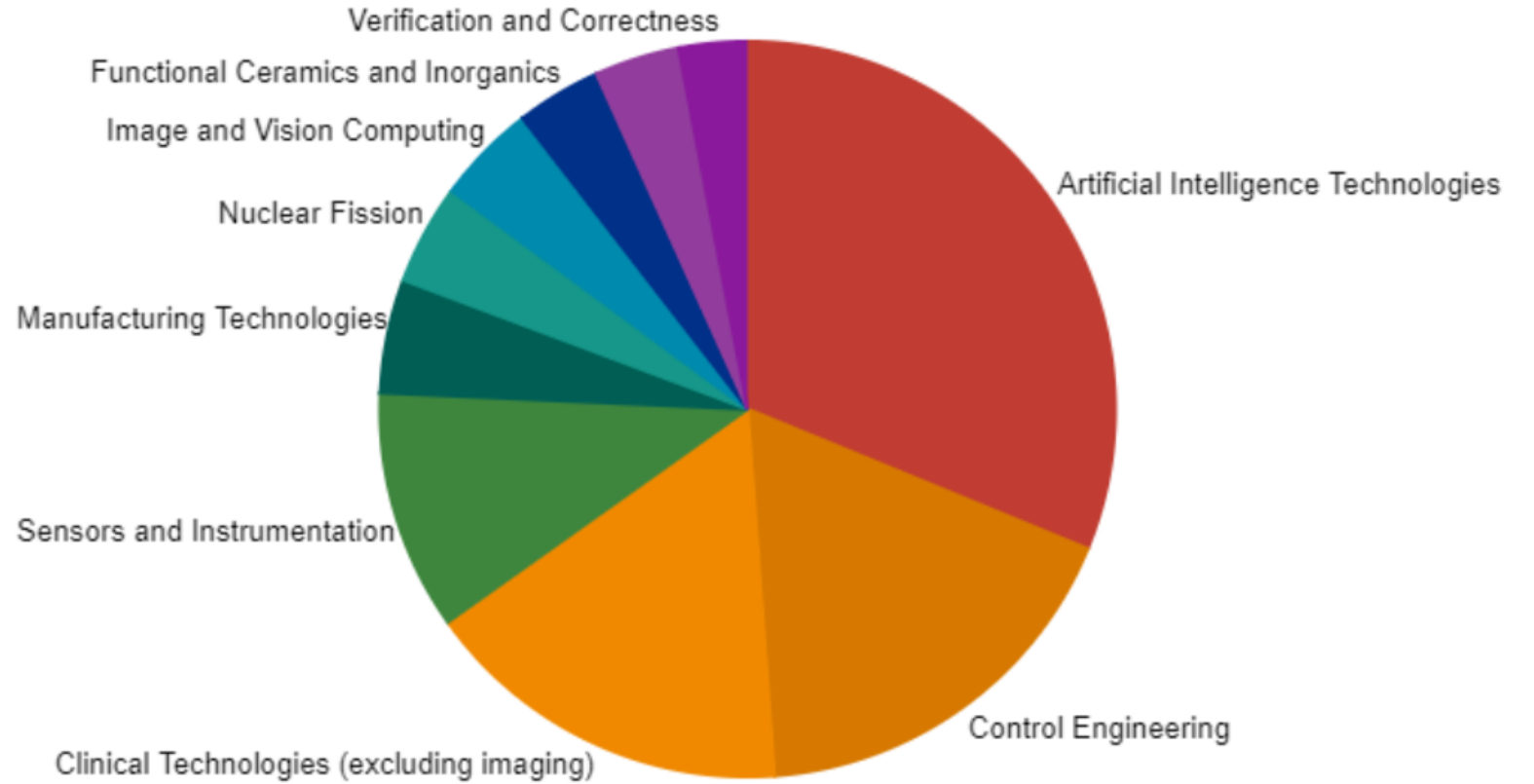
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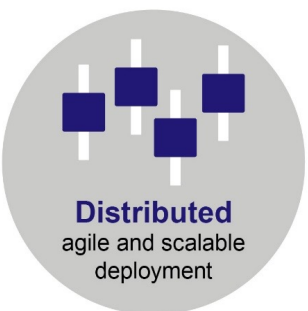
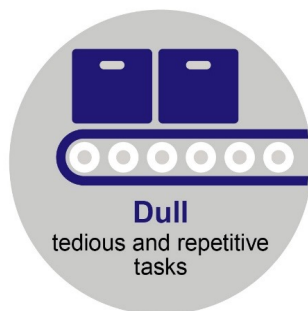
<https://analytics.dkv.global/AI-in-UK-2021/Report.pdf>

RAS core research areas



RAS
Recent investment

Safer World Challenge: The Challenge addressed priority areas from which to remove humans, with the use of robotics and AI technology: 'the six D's'



RAS
Recent investment



Off-shore

No. projects 35
No. partners 107
Grant £35.0m
Match £26.5m



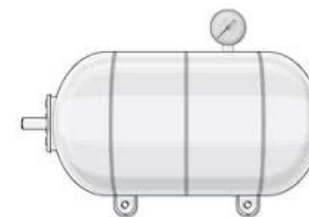
Nuclear

No. projects 15
No. partners 50
Grant £34.2m
Match £33.3m



Space

No. projects 8
No. partners 23
Grant £12.6m
Match £9.8m



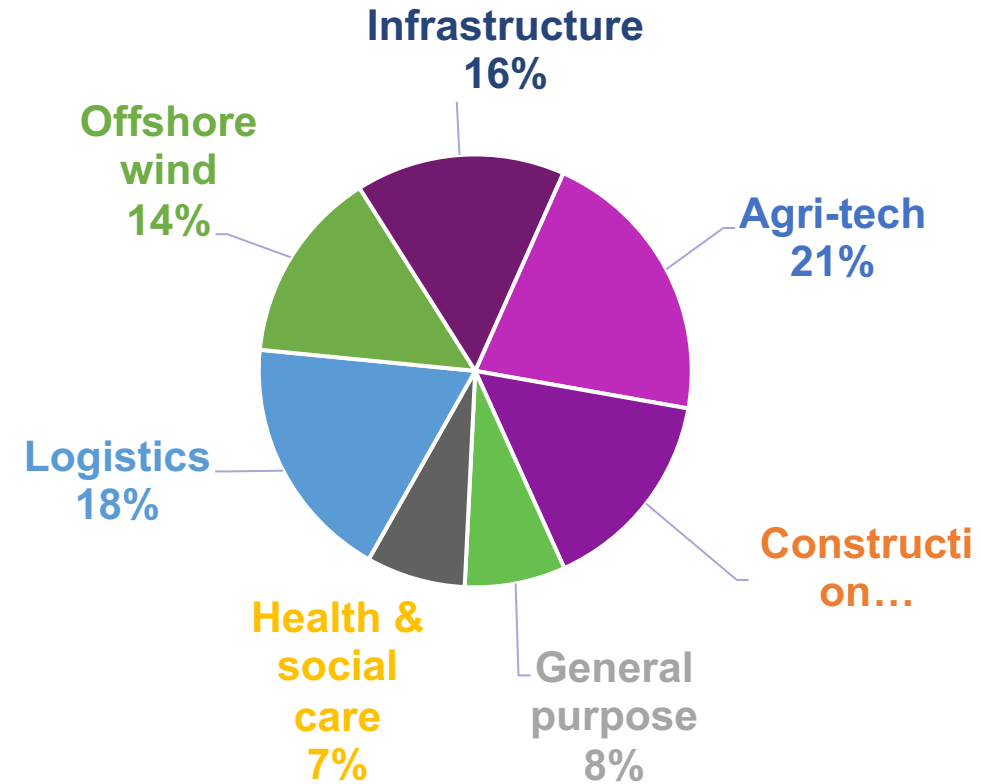
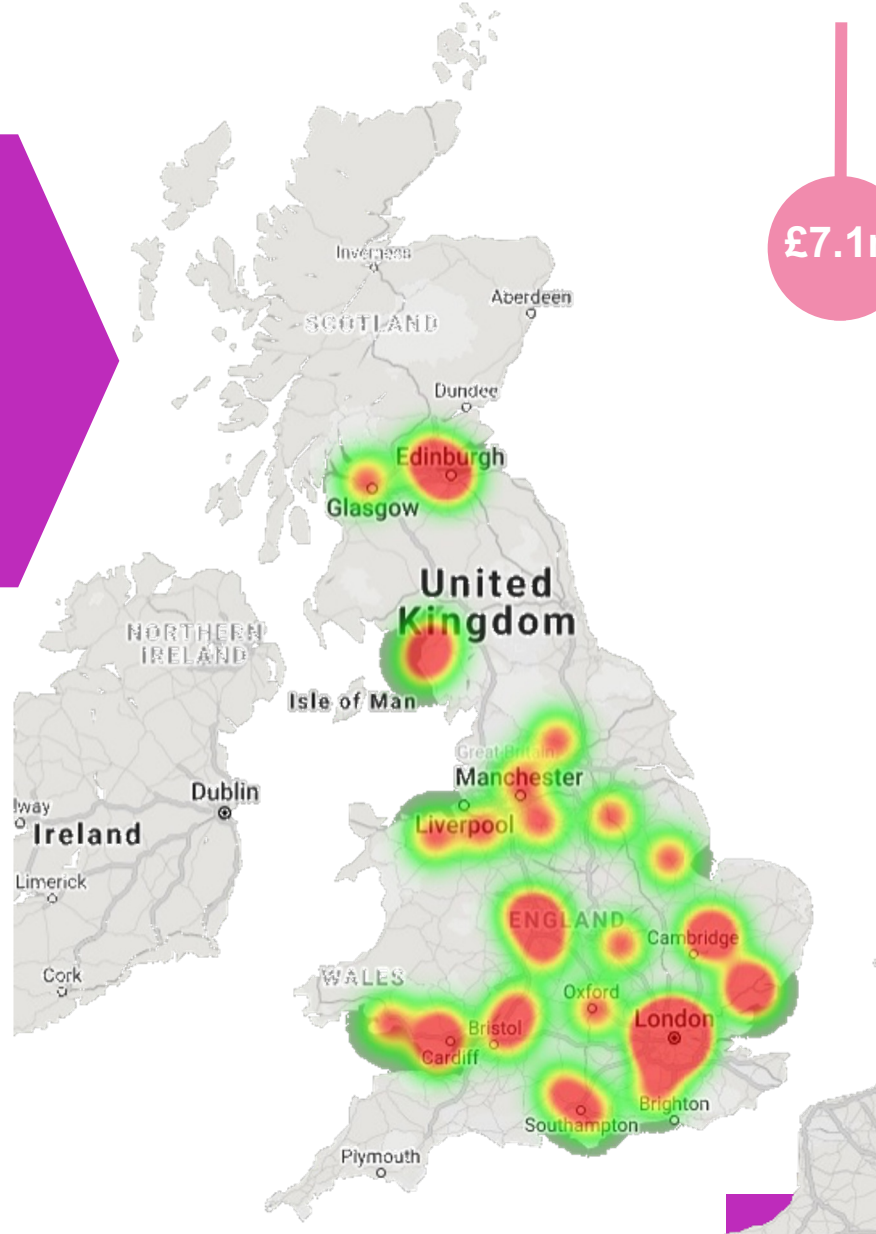
Cross-Cutting

No. projects 24
No. partners 59
Grant £11.7m
Match £6.0m

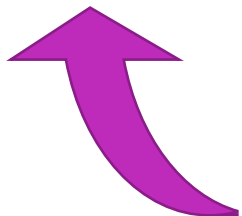
funding awarded

£7.1m

RAS
Recent investment



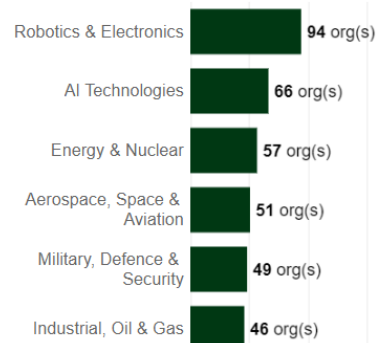
RAS
Recent investment



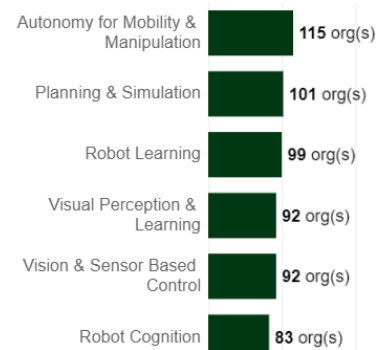
Industry

[USING THE MAP](#) ⓘ
 [RESET FILTERS](#) ⬅️
 [GET IN TOUCH](#) @
 [MENU](#) ☰

Application Sectors



Capabilities



Select an application sector

(All) [v]

Select a capability

(All) [v]

Search in orgs & descriptions

[input field]

Select size

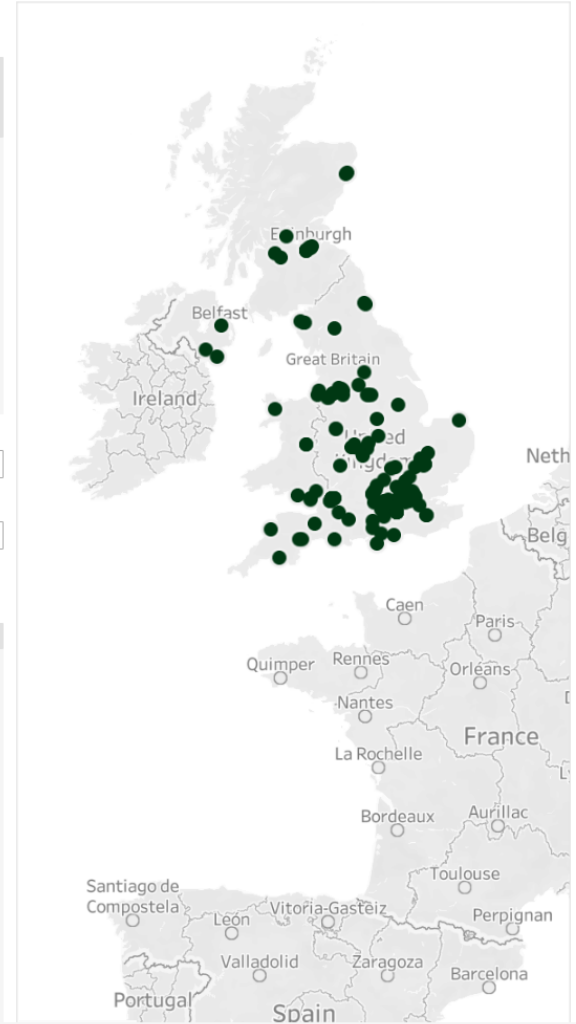
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Select an organisation type

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Organisations

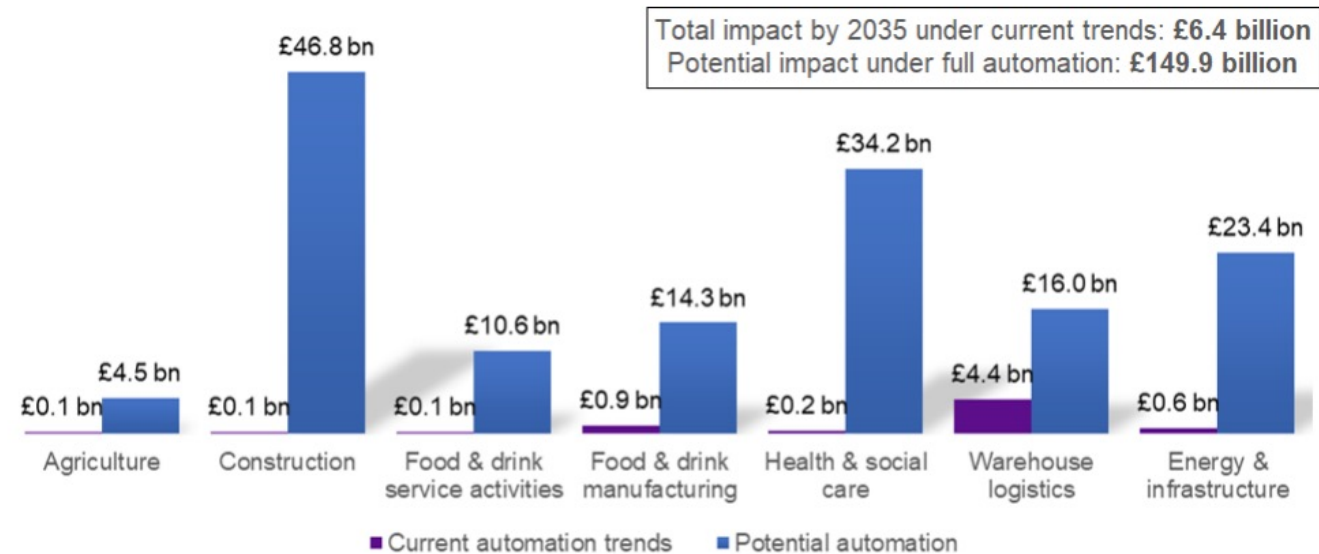
<p>"Centre for Doctoral Training in Robotics and Autonomous Systems" at the Edinburgh Centre of Robotics</p>	<p>Robots that can learn, adapt and take decisions will revolutionise our economy and society over the next 20 years. At the Edinburgh Centre of Robotics, we work on various research areas in the field of Robotics and Autonomous systems, with a focus on safety and safe interaction between robots, people and their environments.</p> <p>The EPSRC Centre for Doctoral Training in Robotics and Autonomous Systems (CDT-RAS), hosted at the Edinburgh Centre of Robotics, is leading in the UK effort to realise its industrial potential in this revolution, by producing a new generation of highly skilled researchers, trained to take a central role through t..</p>	<p>info</p>
<p>ACADEMY OF ROBOTICS LIMITED</p>	<p>We are a technology company with an extraordinary technical team of engineers, scientists, and researchers. We specialise in creating technology to perform or simplify complex tasks. We combine the best techniques from machine learning and mechatronics to build powerful self-adapting machines and task specific artificial intelligence. We are currently working on Kar-go one of the worlds first autonomous delivery car vehicles being tested in Wales and the Streets of London, UK.</p>	<p>info</p>



RAS&AI Opportunity drivers

■ Software and hardware automation

The size of the prize: Potential value of GVA that could be attributable to RAS, by 2035, if potential rates of automation were achieved





Innovate
UK

Thank you



@InnovateUK



Innovate
UK



Innovate UK



SCAN ME

AI



SCAN ME

RAS



Innovate
UK

Questions?





AI and Robotics Landscape in Germany

Ulrike Ritzmann

Horizon Europe – AI, Data & Robotics Consortia Building Event



German AI Strategy

Nov. 2018: the German Federal Government announced its **national Strategy for Artificial Intelligence**

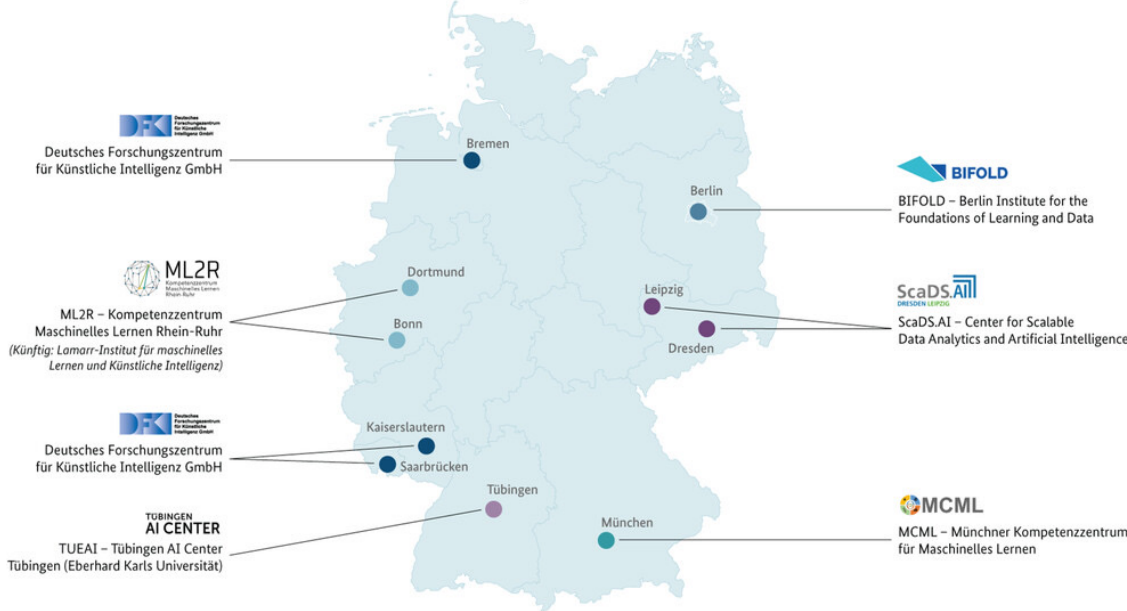
- goal: establish **“AI made in Germany”** as an international trademark for cutting-edge, secure AI applications aimed at serving the common good in line with Europe’s core values
- until 2025, the Federal Government will allocate five billion euros

In addition: Strategies of each of the federal states



AI Competence Centers

KI-Kompetenzzentren



German Research Center for AI (DFKI):

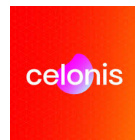
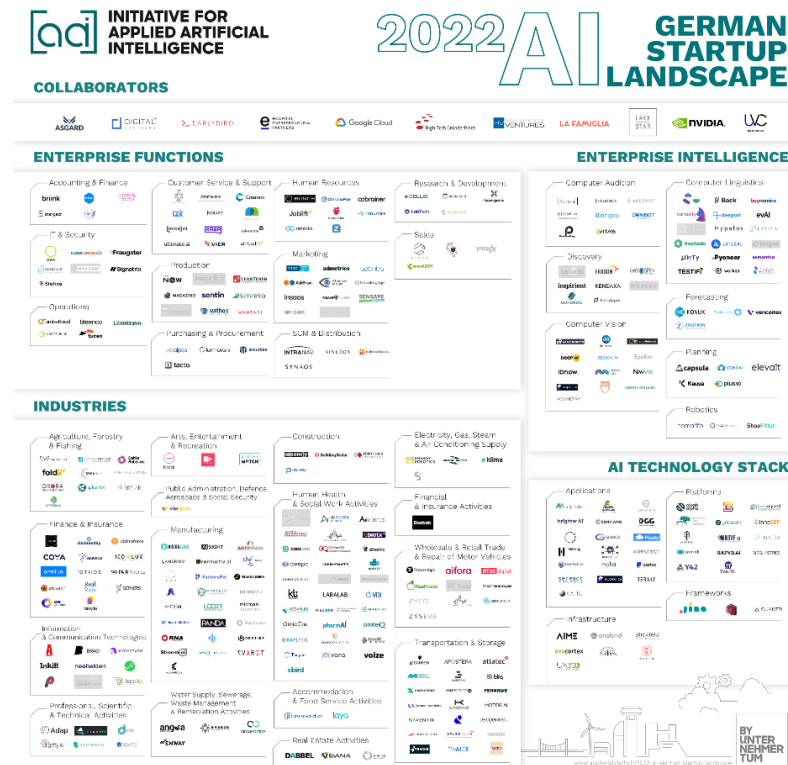
- Founded in 1988
- About 1500 employees working in more than 400 projects

5 AI Competence Centers

- More than 1.000 employees
- about 1.000 papers per year
- Long term funding

Landscape in AI

- About 230 research facilities
- 220 professorships working on AI topics
- Wide range of companies and about 280 AI-startups



German AI startup landscape:

<https://www.appliedai.de/de/hub/2022-deutsche-ki-startup-landkarte>

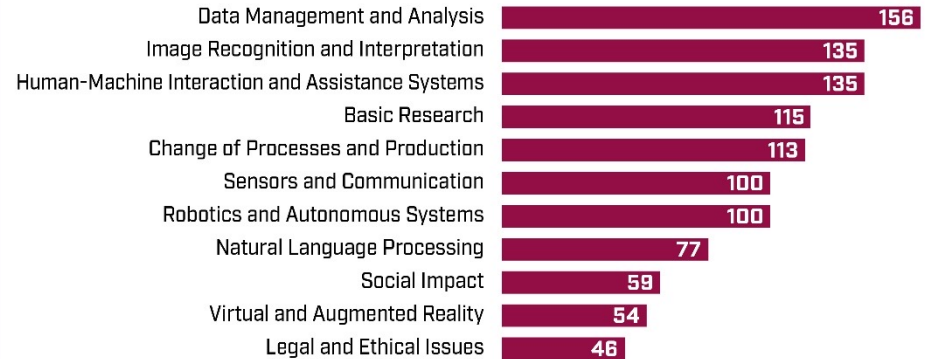
Germany's Platform for Artificial Intelligence



Research Institutions*



AI Focus**



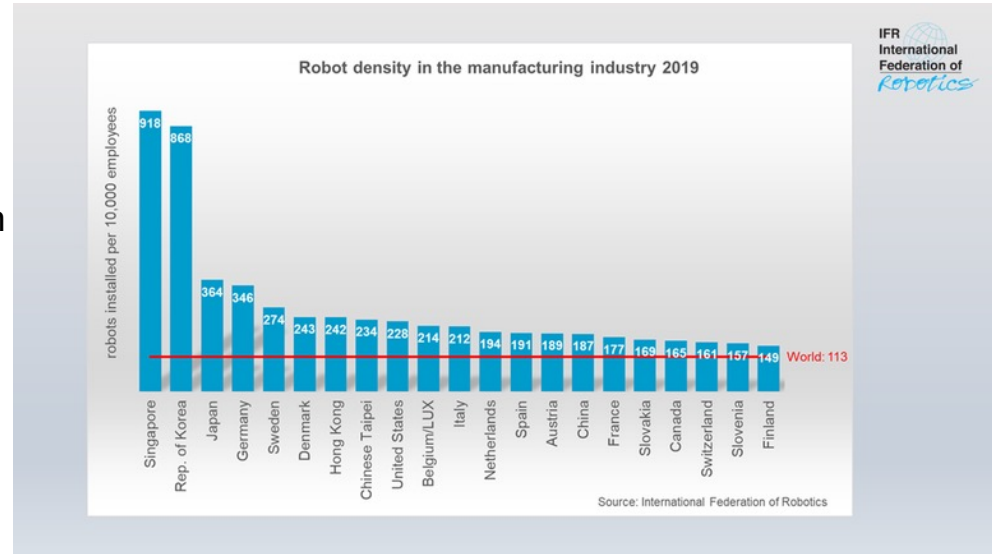
* n=253 ** Multiple answers possible

Source: AI Map of Plattform Lernende Systeme (Status July 2021)

<https://www.plattform-lernende-systeme.de>

Landscape in Robotics

- Germany is one of the most automated economies in the world (4th rank)
- Every third robot in Europe is implemented in Germany
- Automation is a strong field in Germany
- Very active startup community and various activities in health, autonomous driving, ...
- New Networks are forming:
 - German Robotik Verband: <https://robotikverband.de/>
 - VDMA section Robotik: <https://www.vdma.org/robotik>



Landscape in Robotics

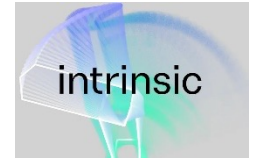


Munich

- Munich Institute of Robotics and Machine Intelligence
- Startups: Franka Emika, Agile Robots, Robco oder Robominds
- Apple, Google (Intrinsic), IBM



Technische
Universität
München



Baden-Wuerttemberg

- Cyber Valley in Tübingen
- Startups: Fruitcore Robotics, Neura Robotics, Artiminds ...
- Large companies such as Fanuc or Festo and many SMEs



Robot Valley Saxony

- 27 startups, 41 research institutions, more than 300 companies
- Startups like Wandelbot



Berlin

- Cluster: Science of Intelligence
- Very active startup area: Enway, AIRTEAM





Thank you.

AI and Data Landscape in Austria

Allan Hanbury



Informatics



COMPLEXITY
SCIENCE
HUB
VIENNA



DIO
Data Intelligence Offensive

AI Startups & Companies

AgriTech & Forest 		Big Data & Enablers 		EdgeAI 		EduTech 		Enterprise 		CleanTech & GreenTech 			
Fashion 		FinTech, InsurTech & RegTech 				Gaming 		GeoAI & Asset Inspection 		Health & MedTech 			
HR Tech 		Image & Video Processing 				Industry & Robotics 				Language & Text 			
Market & Media Analytics 		MediaTech 		ML Ops 		Mobility 		Privacy 		Productivity 		Retail & eCommerce 	
Sales, Marketing & PR 		SportsTech 		Supplychain & Logistics 		TaxTech 		Tourism 		Trustworthy AI & Ethics 		further info	

Early Adopters

Corporate 						Public 					
----------------------	--	--	--	--	--	-------------------	--	--	--	--	--

Enablers & Extended Ecosystem

Universities & Educational Institutions 				Research 				Organizations & Communities 				Public 		Accelerators, Incubators & Investors 			
								Media 		Conferences 							

<https://www.enlite.ai/insights/ai-landscape-austria>

Companies & Startups

AgriTech

AI applications in the agricultural sector range from crop to cattle monitoring. Technologies like these can support farmers to increase margins and limit operational risk. Recently there has also been an uptick in AI applications for adjacent sectors such as forestry and environmental technologies.

- [Smartbow](#)
- [Farmdok](#)
- [Metos](#)
- [SmaXtec](#)
- [Pegel Alarm v3.0](#)
- [Festmeter v3.0](#)

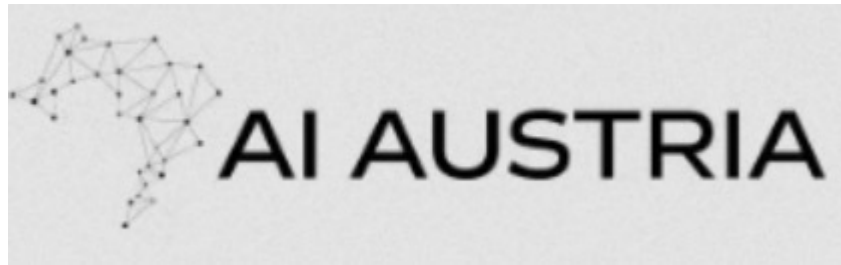
Automotive & Mobility

Austria has a long and successful history in automotive engineering and is home to renowned brands such as AVL and MagnaSteyr. In recent years, local companies not only accelerated their efforts towards e-mobility and digitization, but also lead the charge when it comes to applying AI in automotive engineering. With Evolve.Tech a classic DeepTech startup has emerged, which aims to revolutionize voice detection with custom models and AI silicon.

- [Andata](#)
- [AVL List](#)

<https://www.enlite.ai/insights/ai-landscape-austria>

AI Associations in Austria



<https://aiaustria.com/>



<https://www.asai.ac.at/en/>

Data Intelligence Offensive

Association for the promotion of the data economy and the optimisation of data technologies.



How DIO works

WORKING GROUPS

... enable an exchange among different experts on relevant cross-sectional issues as well as the preparation of statements on these topics, e.g. data & ethics



DATA SPACES

... focus on higher-level domains and are a potential basis for data circles. In domain-specific data spaces an exchange of metadata can optionally take place, e.g. mobility



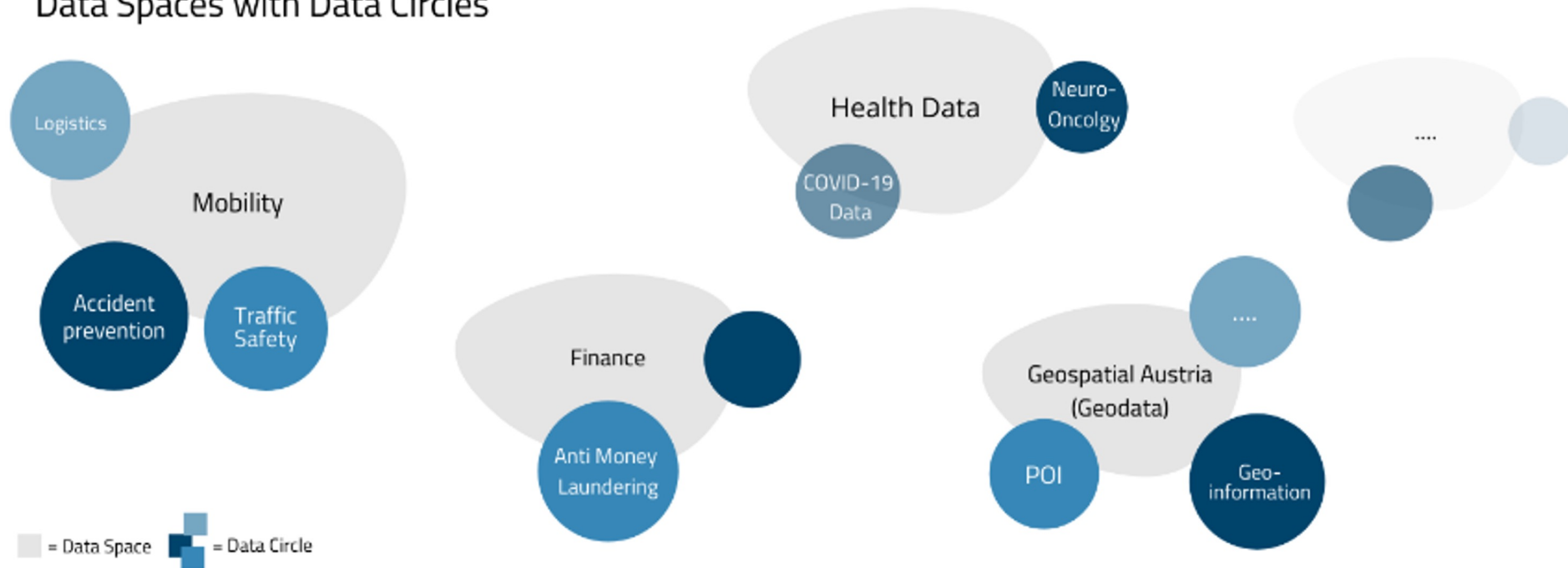
DATA CIRCLES

... implement a concrete data exchange in a specific field of application. The added value is identified, obstacles are removed and demonstrators are created, e.g. persons with reduced mobility

Working Groups, Data Spaces & Data Circles



Data Spaces with Data Circles



DIO Members





Informatics



COMPLEXITY
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HUB
VIENNA



DIO

Data Intelligence Offensive

Univ.-Prof. Dr. Allan Hanbury

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Informatics

Austrian Robotics Landscape

from **GMAR** (<https://www.gmar.at/>) point of view

What is **GMAR** (in English) ?



österreichische
Gesellschaft für
Mess-,
Automatisierungs- &
Robotertechnik

might be translated to ...

Austrian

**Society for
Metrology,
Automation &
Robotics**

What is **GMAR** ?

- An Austrian institution for **representation of interests** in metrology, automation and robotics.
- **Representing scientific expertise in robotics**
 - Austrian Robotics Workshop (2011-2022) <https://www.roboticsworkshop.at/>
- Rich knowledge and many years of **experience in the field of robotics.**
 - Especially with respect to industrial companies in partner network.

GMAR activities

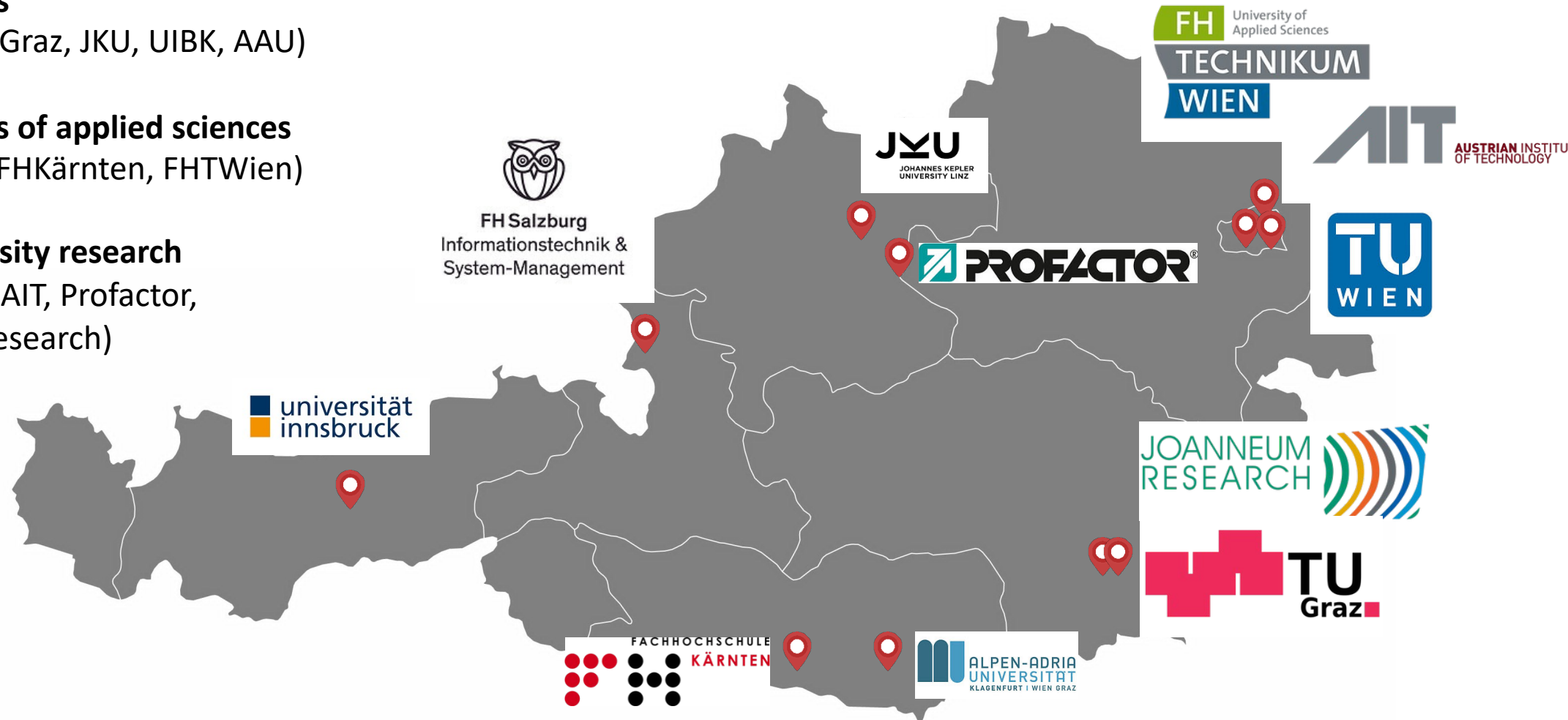
- Preparation of potential analyses, roadmaps and concepts for research tenders.
- Platform for all issues related to robotics in order to be able to bundle existing forces and find synergies.
- **Bringing stakeholders together!**

Local **GMAR** innovation network



Who is **GMAR** (robotics related R&D) ?

- **5 universities**
(TUWien, TUGraz, JKU, UIBK, AAU)
- **3 universities of applied sciences**
(FHSalzburg, FHKärnten, FHTWien)
- **3 non university research institutions** (AIT, Profactor, Joanneum Research)



Who is **GMAR** (robotics related partner companies) ?

- Robot manufacturers
- Technology providers
e.g. AI, safety sensors, navigation, AGV,...
- System integrators
- Logistics system developers



Robotics related R&D Expertise in **GMAR** ...

...covers all aspects from

- Robotics
 - e.g.
 - Human Robot Collaboration, Human Centered Robotics or Technology Experience
 - Cognitive Robotics
 - Sustainable Robotics (<https://sparc-robotics-portal.eu/web/sustainability/home>)
- Automation, Mechatronics & Control
- Machine Learning & AI
- Sensors, Metrology, Machine Vision
 - Zero Defect Manufacturing (<https://www.zdmp.eu/>)

Contact Details



Andreas Pichler

PROFACTOR GmbH

Robotics and Automation Systems | CTO

President GMAR

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www.profactor.at

Introduction



Non-university

Research and Technology Organisation



We are pioneers of the thinking production.



We bring production back home.




We research for competitiveness of the European industry.

 **PROFACTOR[®]**

Mission Statements

Facts and figures



Since 1995 

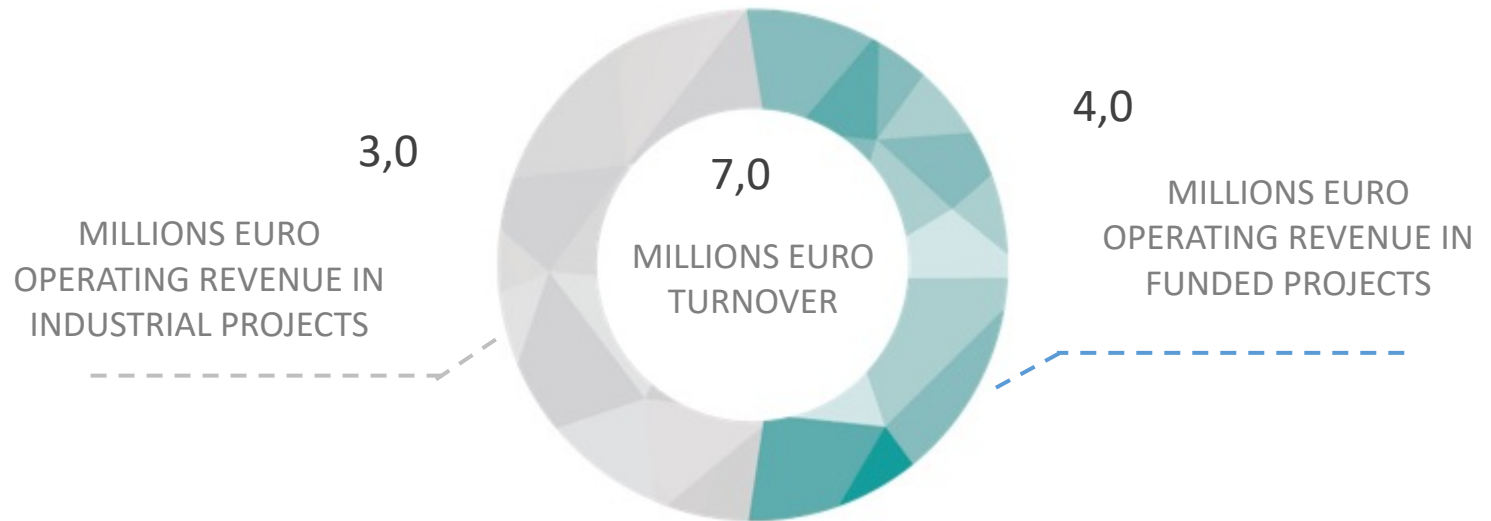


LOCATIONS:
STEYR and VIENNA

~80



EMPLOYEES



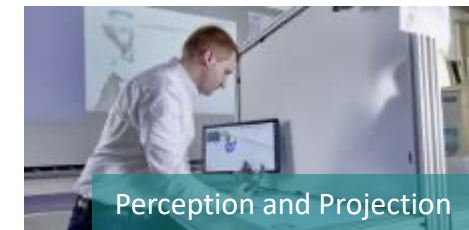
PROFACTOR[®] Our Profile



Research



Solutions



PROFACOR® EU-project experience

- <https://cordis.europa.eu/>
- More than 25 robotics, automation and machine vision related projects with Profactor contribution were started in the last 15 years.



Ongoing robotics related EU projects at



<https://www.zdmp.eu>



<https://www.project-tinker.eu/>



<https://www.teamingai-project.eu/>

Current robotics related EU projects at



<https://concertproject.eu/>



<https://www.felice-project.eu/>



<https://www.drapebot.eu/>

Introduction



Upcoming project proposals

Call: HORIZON-CL4-2022-DIGITAL-EMERGING-02-06 (RIA)

Project Title: Physically Intelligent Collaborative Robot (PICBOT)

Duration: 36 (42) months

TRL: 2-3 → 4-5

Aim: develop **intrinsically safe physically powerful** robotic systems with proximity sensing capability for human-scale **collaborative tasks**

Partners Required

AI Expert in Sensor fusion and Decision Making (Digital Twin)

SSH experts (use case evaluation, requirement analysis)

Tech Provider Artificial flexible *intelligent* robot skin

Please contact:

Sharath Chandra Akkaladevi, Robotics and Automation Systems, Profactor GmbH; Sharath.akkaladevi@profactor.at Tel: +43(0)7252/885-325



Innovate
UK

How to get ready for Horizon Europe and find the right partners?

National Contact Points (Digital) Horizon Europe

Alrun Hauke, DLR (Germany) - alrun.hauke@dlr.de

Craig Sharp, UKRI (UK) - NCP-Digital@innovateuk.ukri.org

Thomas Zergoi, FFG (Austria) ICT@ffg.at



Innovate
UK

www.ukri.org/HorizonEU

HORIZON EUROPE

THE NEXT EU RESEARCH & INNOVATION
PROGRAMME (2021 – 2027)

General info (collaborative R&D)

- **Eligibility:** Must be a consortium of minimum 3 independent legal entities, each established in a different EU Member State (MS) or Associated countries, with at least 1 of them established in a MS.
- **UK entities are eligible (treated as if we had associated for application and evaluation)**

Award Criteria

- **Excellence**
- **Impact**
- **Quality** and **Efficiency** of implementation

Main Types of Actions

- **RIA** – Research and Innovation Actions – up to **100%** funding rate
- **IA** – Innovation Actions – up to **70%** funding rate (except non-profit where 100% applies)
- **CSA** – *Coordination and Support Actions* – up to **100%** funding rate

Horizon Europe National Contact Points (NCPs)

International Network of country based, sector specific, impartial advisers to support organisations to participate in EU Framework Programmes. NCPs are recognised and mandated by the European Commission.

- Horizon Europe promotion
- Topic / scope fit
- Proposal feedback/review
- Navigating the portal
- Partner search options
- Query resolution
- Workprogramme, topic updates.
- Results

Full list of UK
National Contact
Points

NCPs for Europe
and the rest of the
world



Horizon Europe Support

Horizon Europe “Digital topic” NCPs – see the [Ideal-IST NCP project page](https://www.ideal-ist.eu/representatives): <https://www.ideal-ist.eu/representatives> (note - cluster 4 NCP link below is for Digital, Industry and Space NCPs combined)

[International NCP network](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/ncp) – support in EU Member States, Associated Countries and Third Countries <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/ncp>

[UK NCPs – listed by theme \(Industry, Digital, etc\)](#)

[Knowledge Transfer Network \(KTN\)](#) has sector specialists as well as EU specialists
Support in the UK Devolved Administrations

[Innovate UK EDGE \(EEN\)](#) has regional offices and access to a large database of companies seeking collaboration

UK Horizon Europe support - www.ukri.org/HorizonEU



Horizon Europe: help for UK applicants

Contents

- **Overview**
- Apply for Horizon Europe funding
- Find partners and collaborators for Horizon Europe
- Get guidance and help with Horizon Europe

Related content

- ⇒ Working on EU-funded projects
- ⇒ UKRI Brussels

Overview

Horizon Europe is an EU research and innovation programme. It has a budget of €95.5 billion and runs until 2027.

If you're a UK-based researcher or innovator, you can apply to most Horizon Europe funding opportunities on the same terms as EU-based applicants.

UK eligibility (European Commission FAQ)

- https://ec.europa.eu/info/sites/default/files/research_and_innovation/strategy_on_research_and_innovation/documents/ec_rtd_uk-participation-in-horizon-europe.pdf

Can UK entities take part in the first calls for proposals of Horizon Europe?

Yes. UK entities including universities, research centres, scientists, innovative businesses, industry, etc. can participate in the first calls for proposals of Horizon Europe as soon as they are published on the [European Commission's website](#).

In duly justified exceptional cases, restrictions may apply and these will be clearly specified in the calls for proposals.

Details

The General Annexes attached to the main Horizon Europe work programme (2021-2022) ensure that UK applicants are treated as if the UK is an associated country throughout the process, from admissibility and eligibility to evaluation, up until the preparation of grant agreements. However, grant agreements can only be signed if the association has come into force. The same treatment is also granted to any applicants from other associated countries currently engaged with the European Commission in an active process of association.

Proposal development

Topic choice and scope

Ensure you (**all**) have a common understanding of what the topic is asking for (draft a brief, check views align, outcomes can be achieved, scope fit, who you need in the consortium)

Digital, Industry and Space workprogramme

https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-7-digital-industry-and-space_horizon-2021-2022_en.pdf

[Funding & Tenders portal->How to Participate->Reference documents->(Select a Programme = Horizon Europe)->Work Programme and Call Documents]

EC Info Days 17th June <https://www.youtube.com/watch?v=4eTGlu6TYqI> (including NCP presentation 1hr:35)

Info day - EC Webinar: How to prepare a successful proposal in Horizon Europe (2 sessions)

<https://www.youtube.com/watch?v=Sgk6poR3gIc>

<https://www.youtube.com/watch?v=1wywAOPdW0>

Support (free, confidential) is available from your National Contact Point



Formal consortium building mechanisms

Participant portal – Every topic once published will have a ‘Partner Search’ function where you can upload your profile and review others that have done so

Brokerage events – European Commission [Info Days](#), Technology Platforms/Flagships, Enterprise Europe Network (EEN), UK’s KTN, NCPs from around Europe, etc will hold events

Partner Search – under the How to participate tab on the EU funding and tenders portal where you can search for past projects and organisations

CORDIS – a useful way of finding past projects and participants and allows you to contact them

No single mechanism..



Searching the formal consortium building mechanisms is a bit like looking for a needle in a haystack – they all look like needles so finding the ones for you can be difficult

The best ways to form winning teams

Being an **effective networker** is much more useful than only submitting a profile into a portal and awaiting contacts. Use your existing professional networks – if you don't know who the sector leaders are in Europe then you should find out

- Use LinkedIn to connect to people from possible consortium partners
- Search [CORDIS](#) for previous, related projects and contact the participants.
- **Join the relevant networks, associations and partnerships, ask your NCP for suggestions**
 - Be an *active* member – say 'hello' when you join the virtual room. Ask questions, support others' opinions, act as if you are already well known to all..
 - Volunteer to draft working papers, take notes, send in useful information – be helpful
 - Speak up at workshops – demonstrate your knowledge and value
 - Show that you would be a valuable partner for collaborative projects(and they lessen their chances without you..)

What constitutes a winning consortium?

One that can **deliver** the expected outcomes within the stated scope and budget (and convince the evaluators that they can)

Common to see mixture of universities, big business, small business, research and technologies organisations, consultancies, local authorities, national authorities all within the one consortium.

There is no 'typical' or 'model' consortium structure/membership. Everyone there has to add value (and describe how this will be developed, managed, refined and outputs integrated over the years and changes that will happen through the project's life).

Include appropriate exploitation partners (especially in higher TRL topics) – to shape/take the outputs of the project and actually implement them (e.g. an automotive/aerospace/industry/etc., industry) to show rapid impact (still need to carry out valuable role – not just there as a “name”)

Useful to include the end user community, possibly as an advisory board or associate partners (not direct beneficiaries but costs e.g. travel can be included in 'other costs'), again to demonstrate route to implementation



2022 deadline topics - The gender dimension

Eligibility: Gender Equality Plan (applicable to calls with 2022 deadlines and onwards)
Participants that are public bodies, research organisations or higher education institutions established in a Member State or Associated Country must have a gender equality plan in place, fulfilling mandatory process-related requirements

Award Criteria: Integration of the gender dimension
Addressing the gender dimension in research and innovation content entails taking into account sex and gender in the whole research & innovation process

Ranking Criteria (for tied scores): Gender balance
Third criteria - Gender balance among personnel named in the proposal who will be primarily responsible for carrying out the research and/or innovation activities, and who are included in the researchers table in the proposal



Proposal Evaluation

- Carried out by independent experts – you and your colleagues [might consider registering](#) as potential evaluators. You won't be allowed to evaluate your own competition but if called upon elsewhere it will give valuable insight.
- Maximum score of 15 points available, 5 for each of section:
 - Excellence
 - Impact
 - Quality and efficiency of the implementation
- Evaluation forms have now been published (can be useful tool on your own review stages)
 - [RIA/IA](#) Standard Evaluation Form
 - [CSA](#) Standard Evaluation Form
- Briefing slides for evaluators have been [published](#) so you can see what they are instructed to do – recommend viewing this





Interpretation of scores

0

The proposal **fails to address the criterion** or cannot be assessed due to missing or incomplete information.

1

Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.

2

Fair. The proposal broadly addresses the criterion, but there are significant weaknesses.

3

Good. The proposal addresses the criterion well, but a number of shortcomings are present.

4

Very Good. The proposal addresses the criterion very well, but a small number of shortcomings are present.

5

Excellent. The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

Key messages - Impact

- Ensure there is a strong **link** between your programme of work and expected impact
- **Explain** how you have calculated your baseline
- **Quantify** the expected impact
- **Explain** the assumptions you have used to extrapolate the expected impact (include evidence of how achievable this is)
- Describe how you will **monitor** the project and measure the impact
- Include a **detailed** dissemination plan that is **tailored** to the stakeholders and explains their involvement
- Explain how the work will be **continued** after the end of the project

Key messages - Excellence

- Define **clear, focused, quantified objectives** (3 to 5 goals for the project)
- Make a clear link to the Specific Challenge and Scope of the Call **topic**
- Include a **thorough** description of the state of the art and how the activities will **build upon it and advance it**
- Include **evidence** that you are operating at the **state of the art**
- Convince the evaluators that the concept will work, **justify your approach** (evidence) and highlight any unique selling points

Key messages - Implementation

- Follow a **logical** structure including clear feedback loops
- Provide sufficient detail to **justify** the budget allocations
- Include a **consistent** level of detail for each work package
- Include a **risk plan**
- **Explain** why the project team has been selected
- **Consider** the balance of effort and whether the partners have provided evidence that they have sufficient operational capacity
- Sufficient **industry** involvement

Points to consider

- Topic selection – and role(s) lead/partner
- Scope fit – check with others at an early stage
- Expected Outcome – can you/consortium deliver (& evidence)
- Outcome section - business plan elements, exploitation, who to do it, figures, etc
- Map out partner mix – when do you need it finalised
- Schedule for proposal development/review (not just near end)
- Reviewing draft proposals - internal or utilise external/fresh eyes?
- Agree in advance when the final version is to be written (plan early)
- Utilise external support (NCPs, etc)
- Proposal – 1 “voice”, with sections linked up
- Make it a compelling read (especially for all the evaluators)
- (Start as early as you can)

UK Horizon Europe Support - www.ukri.org/HorizonEU

Digital NCP – Craig Sharp NCP-Digital@iuk.ukri.org

[UK NCPs – listed by theme \(Industry, Digital, Energy, etc\)](#)

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Services offered by NKS DIT

- Newsletters & info events
- Checking of idea papers and project outlines
- Proposal check and feedback
- Assistance with partner search
- Services for multipliers
- Commissioned and funded by German Ministry of Education and Research (BMBF)
 - free of charge and strictly confidential for proposers



www.nks-dit.de

Other German NCPs:

www.horizont-europa.de/



NKS DIT – German NCP for Cluster 4 Digital & Industry

Subcontractors



Cluster 4 digital part:

DLR PT

industrial part:

PtJ

space part:

NKS Raumfahrt (also hosted by DLR PT)



How to get in touch

Digital part

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- **Hotline**
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- **Dr. Alexandra Brennscheidt**
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brennscheidt@vdi.de

FFG - AUSTRIAN RESEARCH PROMOTION AGENCY

DEPARTMENT OF EUROPEAN AND INTERNATIONAL PROGRAMMES

- Host of **all** Austrian National Contact Points for HORIZON EUROPE
- Network member of EEN and Eureka
- national implementation of european programmes like DIGITAL, LIFE, EDF, InvestEU, NCC,
- in short: We are here to support your European Funding journey!
- Watch our service video:
https://www.youtube.com/watch?v=RJGTOPoxSPI&list=PL5CS9B0hhcyG_njTw90UCWeKS6jWuSK2U&index=2

FFG Website



FFG - MAIN SERVICES



Contact us

by email, phone call...if you have any questions!

<https://www.ffg.at/europa/ncp>



Register for our newsletter

<https://www.ffg.at/form/newsletter-europa>



Check of project idea

send us your “One pager” and we can discuss by phone or video-call



FFG Academy trainings

Trainings, Webinars etc.

<https://www.ffg.at/content/ffg-akademie-die-termine-auf-einen-blick>



Proposalcheck

send us your proposal (as advanced as possible) and we give you written feedback



Join the community

Website, newsletter, events => stay up to date!

FFG Services: <https://www.ffg.at/en/europe/ffg-services>
Online “Help yourself” Informationpackage:
<https://www.ffg.at/europa/akademie/helpyourself>

FFG-Academy

Knowledge transfer and training from project development/application to project closure.
Covers all pillars of Horizon Europe as well as
topics around the implementation of Horizon Europe

Help yourself

<https://www.ffg.at/europa/akademie/helpyourself>

- "Online info packages" on how to apply for funding and how to manage projects
- EC webinars recorded

Learn & Apply

<https://www.ffg.at/europa/akademie-terme>

- Training/Info Online/Presence/Blended
- Fit4Funding Course for young scientists

Meet & Share

<https://www.ffg.at/europa/akademie-terme>

- Exchange and learn from each other
- Making extensive knowledge/experience usable

Individual Consultation

- from project idea to project completion
- Proposal check primarily for coordinators
- tricky legal and financial questions
- builds on existing knowledge
- in cooperation with research services at Austrian Organisations

<https://www.ffg.at/europa/akademie>

FFG NEWSLETTER – REGISTER NOW!

	FFG: Europa und Internationales im Fokus
	<u>Newsletter</u> – 2x per month Tailored information on topics of your choice as a supplement to the FFG eNewsletter
	Focused & bundled Current funding opportunities, events, services and news
	Stay connected – join us on <u>LinkedIn</u> and <u>Facebook</u>



Topics:

- ✓ Research Career (in English)
- ✓ Health
- ✓ Culture, Creativity & incl. Society
- ✓ Civil Security
- ✓ Digital, Industry & Space
- ✓ Climate, Energy & Mobility
- ✓ Food, nat. resources & environment
- ✓ Economy, Innovation & Growth
- ✓ European Defense Fund
- ✓ European Research Area & International Cooperation
- ✓ Legal & Finance

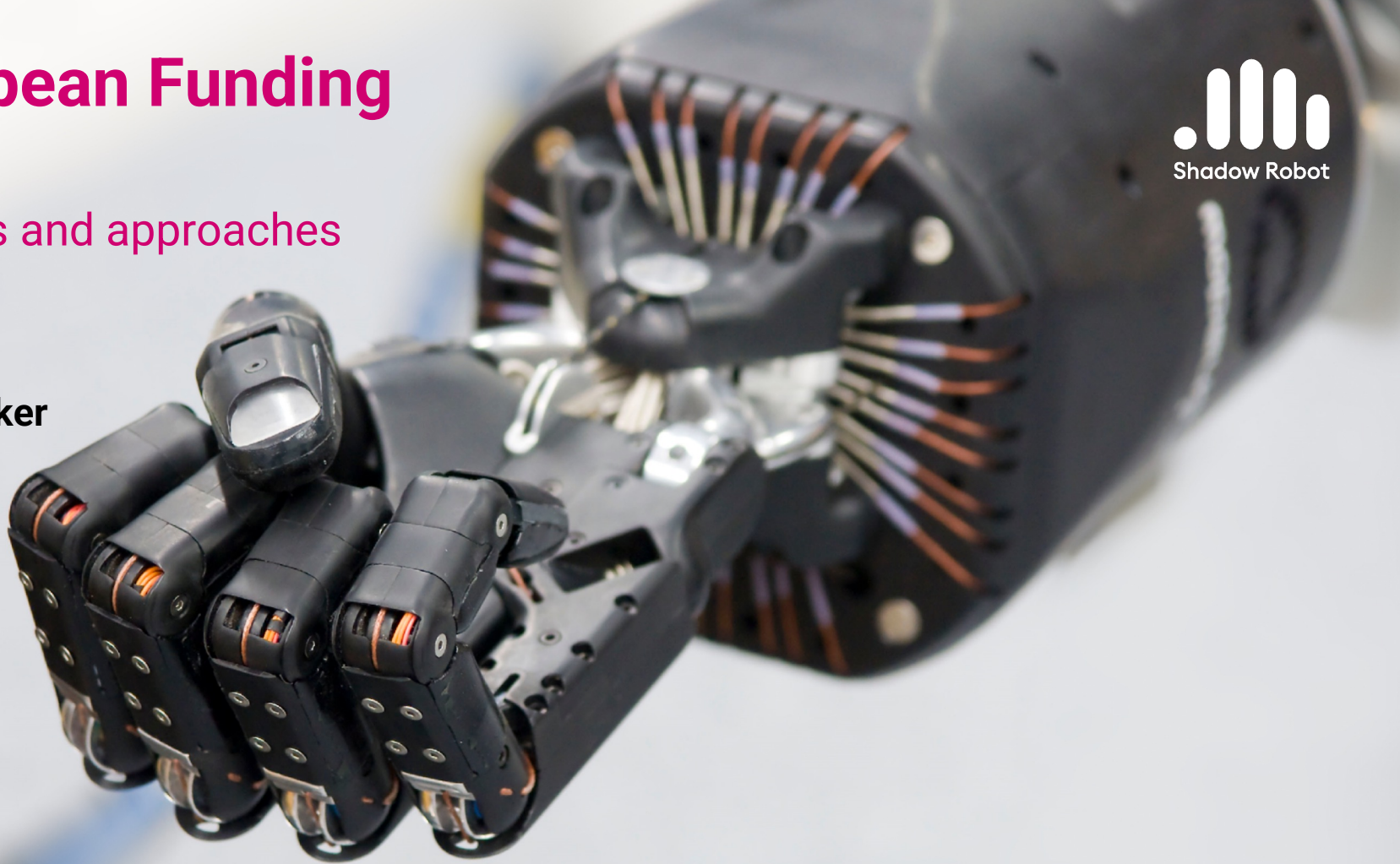
QUESTIONS?

European Funding

Benefits and approaches

Rich Walker
Director

July 2022



Core Challenges for a Technology Company

02

1. Develop robot hand

HANDLE

2. Explore applications of robot hand

**RAMCIP
IQONIC
MERGING
ECHORD
ECHORD++**

3. Explore technologies that can improve robot hand

**TACO
ATLASS
MERGING
ECHORD++
CONTEST**

4. Explore technologies that seem interesting

**STIFF-FLOP
ATLASS**

5. Find people to work with/for us

**SMART-E
CONTEST
CLAWAR**

Our clients



HITACHI



SIEMENS



Shadow Robot – Awesome robots making working lives better



- FLAGSHIP PRODUCT

Shadow Dexterous Hand

Product

World's most human-like robot hand

Advanced grasping and Manipulation

Can be controlled remotely
(teleoperation)

A key component in our
TACTILE TELEROBOT

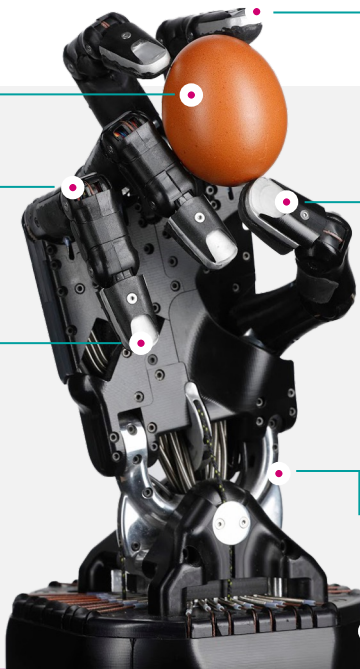


Shadow Dexterous Hand

The ONLY robot hand on the market to have 24 movements and 20 degrees of freedom (DOF) for increased flexibility in grasping and manipulating a range of objects.

The positioning of the fingers and the knuckles give comparable fingertip locations to the human hand.

The flex of the palm for the little finger. Also complete with finger nails for the closest kinematics to the human hand making it familiar to deploy and intuitive to handle.



Each finger moves side to side independently (abduct, adduct), for unparalleled dexterity a total of 129 sensors to increase accuracy and enable high-level precision.

Pressure Sensor Tactiles in the finger tips allow the operator to feel pressure, force, temperature and vibration.

Thumb

Tendons & Wrist

Forearm

NEW TELEROBOT

ROBOTS THAT CAN FEEL

06



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Markets for Dexterous Hands

07

Robotics

EOD

Nuclear

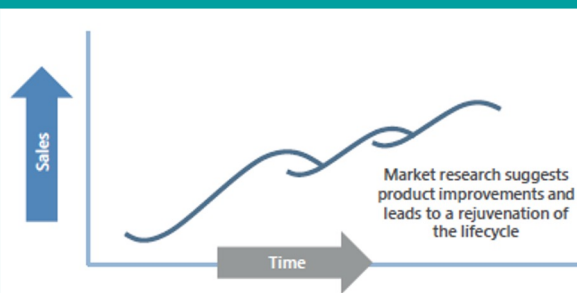
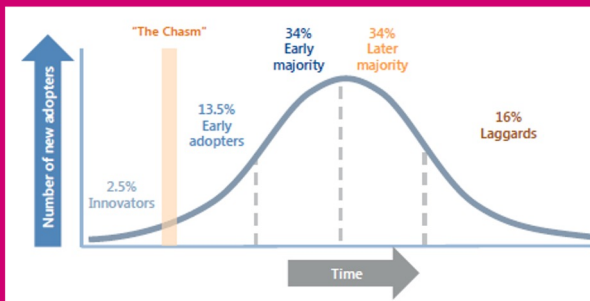
Pharma

Remote maintenance

Remote presence

Manufacturing logistics

Flexible automation



Dexterous Manipulation needs a range of supporting technologies. We're developing them with partners...

Types of Successful Proposals

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1. Because You Asked

approached by a consortium with a clear idea who need a partner offering what we have (TACO)

2. Because We Want To

form a consortium based around your own development roadmap – and get someone else to front it (HANDLE)

3. Because We Can

spot a market opportunity you wouldn't normally go for, and persuade the EC to fund the development (PV-S)

Getting the Proposal Right

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Have a named responsible person in each organisation.

Have a regular teleconference and a working mailing list.

Don't spend money on writing the proposal!

Make sure there's a real reason for each partner.

Make sure you actually **fit the call**

That 5pm deadline? It's firm. Really firm. And it's Brussels time.

Pitfalls!

- Appalling failure rates.
- 100 page documents in EUglish.
- Verification, validation and Audit.
- Did I say Audit?
- Living on Eurostar.

The partners who are too busy to work on the proposal – they won't get any less busy!

Trying to organise 4 meetings a year with 15 people from 8 countries.

Holding on to the Advance and other aspects of the finances

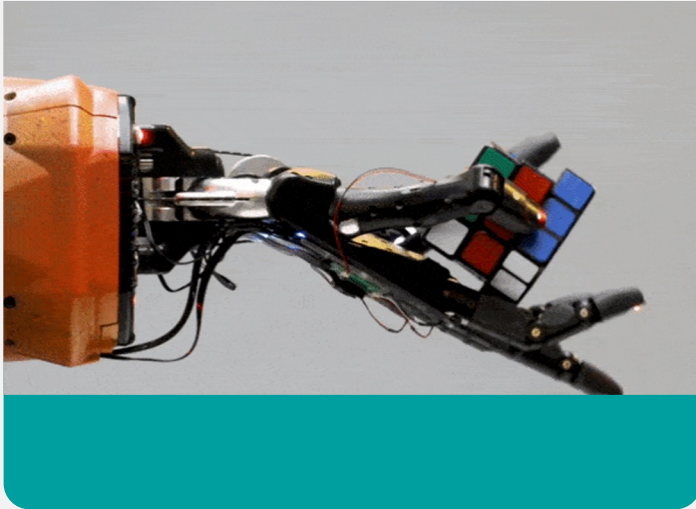
Benefits!

- Network all over Europe.
- Contacts and connections.
- ~~160% of annual funding in the first year.~~
- You have to work with the best people in Europe.

- Get funded to do something you wanted to do, with people you wanted to work with.
- Opportunity to influence future direction of EU. (Technology Platforms)
- Your idea has been shown to be a good one by getting through the rigorous assessment process.

Our Products & Services

Other



- [Dexterous Hand Series](#)
- [Teleoperation](#)
- [Consulting](#)
- [Research Collaborations](#)
- Extra Support & Extended Warranties

Get in touch!



Contact us

- contact@shadowrobot.com
- +44 (0)20 7700 2487
- shadowrobot.com

We're happy to discuss collaborations!

Awards

