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AI Watch



European Commission

JRC SCIENCE FOR POLICY REPORT

Digital Transformation
in Transport, Construction, Energy,
Government and Public Administration



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Joint Research Centre



European Commission

AI Watch: The EC Knowledge Service to monitor the Development, Uptake and Impact of AI for Europe

AI for the public sector
AI Landscape and indicators
Data: a cornerstone for AI
Education and Skills
Evolution of AI technology
Evolution of AI uptake
Key Enablers
Social perspective
Strategic Actions and Coordination

The screenshot shows the AI Watch website interface. At the top, there is the European Commission logo, the language set to English, and a search bar. Below this is a navigation bar with the breadcrumb "European Commission > Knowledge for policy > AI Watch". The main heading is "AI Watch" with the subtitle "Monitor the development, uptake and impact of Artificial Intelligence for Europe". A secondary search bar is located below the heading, with filters for "All", "Online Resource", "Publication", "Events", and "News". The "Topics" section is organized into a grid of nine items:

- AI for the public sector**: AI-enabled solutions can deliver shorter and richer feedback loops for all levels of governance, providing an opportunity to speed up, improve the efficiency and effectiveness of service delivery.
- AI Landscape and indicators**: AI is experiencing a period of intense progress, due to several key technological enablers: faster processing, increased amounts of data, and better algorithms. Still lacking official statistics, front end methodologies have been applied to analyse the AI ecosystem and track its evolution.
- Data: a cornerstone for AI – Toward a Common European Data Space**: For an application of artificial intelligence (AI) to be ready for market entry it has to learn on the basis of training data. Additionally, it may need further data sources in order to fulfil its functions. With its actions, the EC seeks to support wider availability of relevant data.
- Economic perspective**: AI as a general-purpose technology can rapidly spread across industry sectors and yield strong positive growth effects.
- Education and Skills**: Education and training are crucial to harness AI, but AI can also help us rethink what competences and skills will be needed in the future to live a fulfilling life, and master the digital transformation of our society.
- Evolution of AI technology**: Although AI has a long history of development recent breakthroughs in state of the art algorithms has produced a huge impact on multiple domains, industrial sectors and robotics.
- Key Enablers**: The Digital Single Market and its regulatory framework will provide key enablers to enhance AI adoption.
- Social perspective**: It is crucial to think how the concepts of autonomy and identity of individuals as well as security, safety and privacy issues might change under the influence of AI.
- Strategic Actions and Coordination**: "In Europe, any successful strategy dealing with AI needs to be cross-border. A large number of Member States agreed to work together on the opportunities and challenges brought by AI. That is excellent news. Cooperation will focus on reinforcing European AI research centres, creating synergies in..."

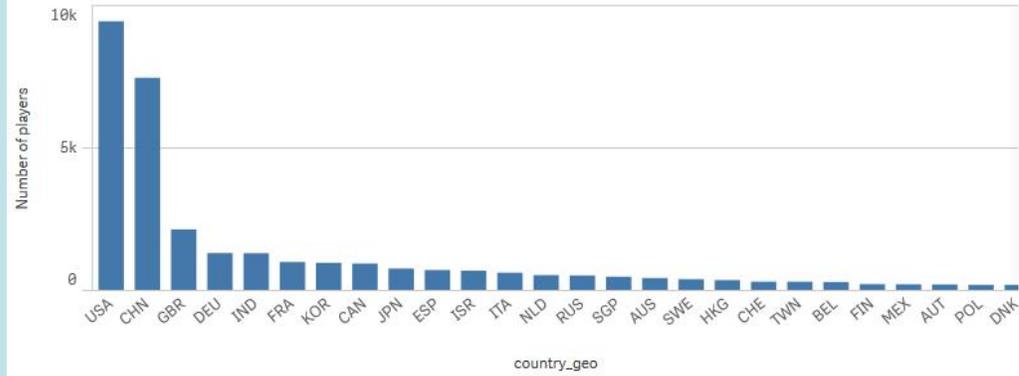
https://ec.europa.eu/knowledge4policy/ai-watch_en

AI Landscape

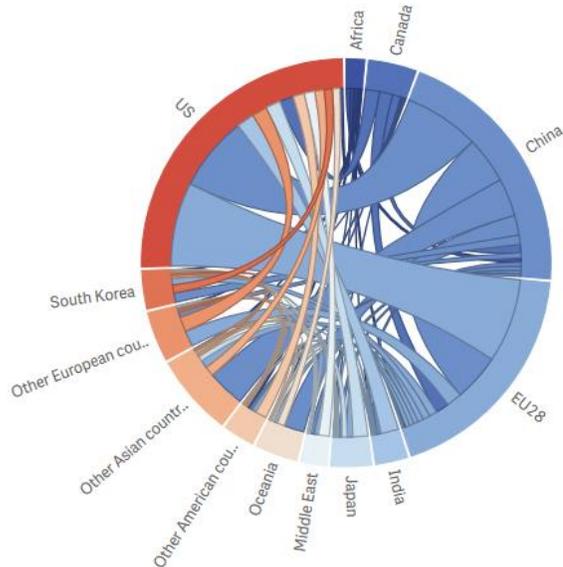
Overview

AI LANDSCAPE - OVERVIEW

Number of players by country



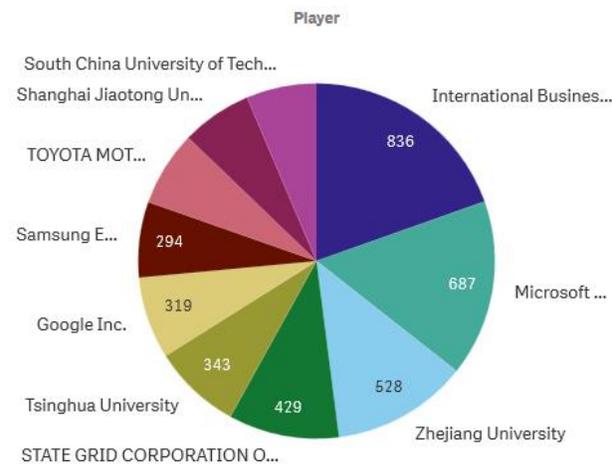
Shared R&D activities by Area



Top 10 cites (by number of players)



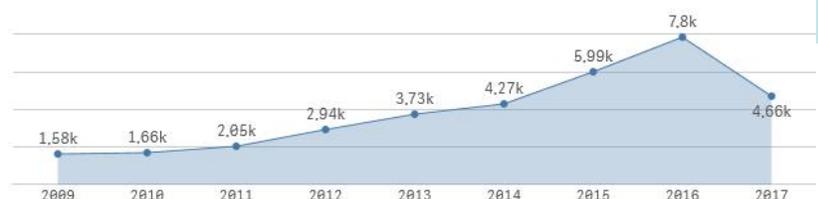
Top 10 R&D players



Organisation Type

Organisation Type	Values			
	Players	Frontier Research	EU projects	Patents
Firm	28559	1871	723	26352
Research Institute	5370	3702	2879	13470
Governmental Institution	403	8	168	461

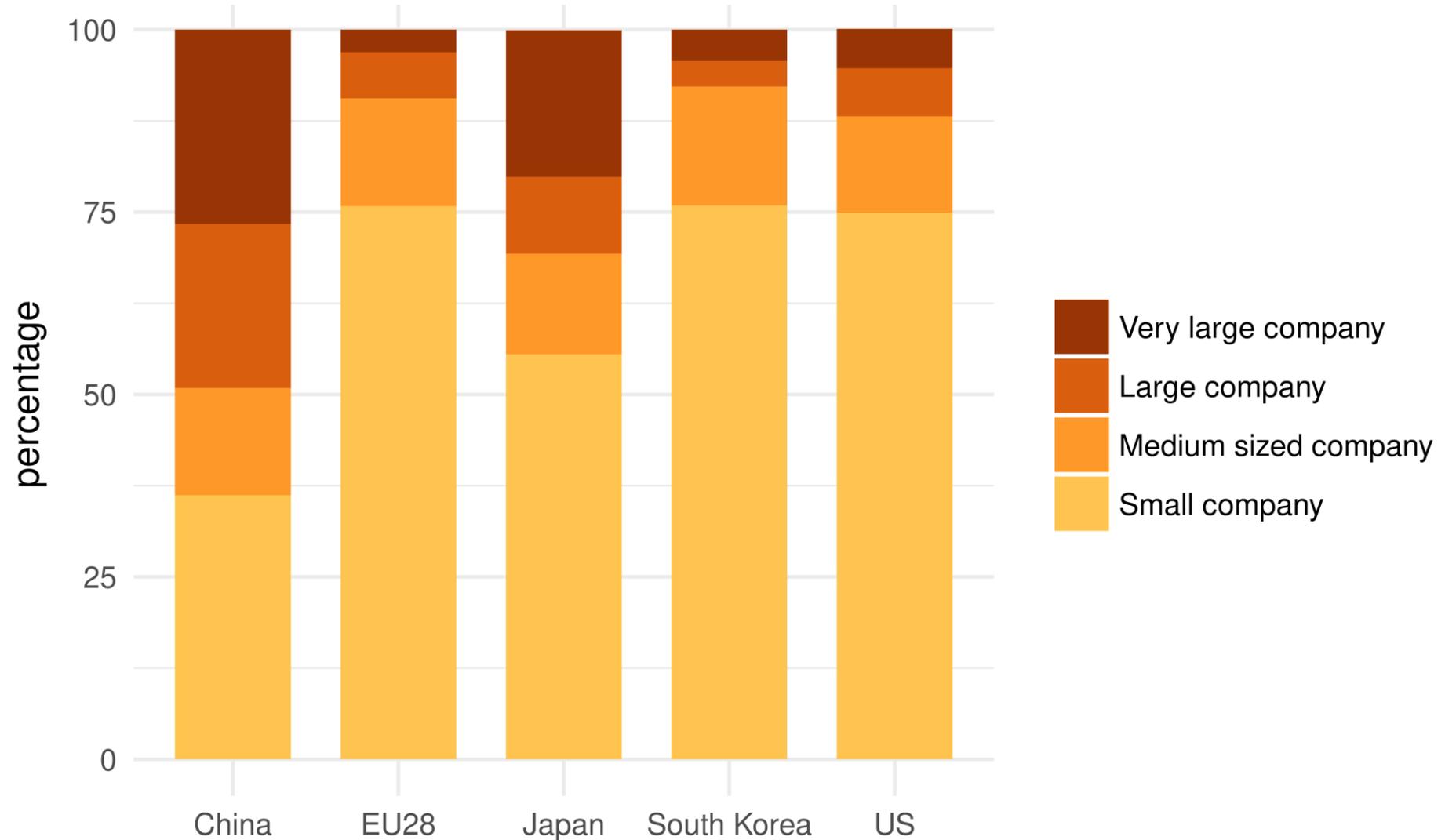
R&D activities by year



AI Landscape

Industry

- What size AI firms have?



Percentage distribution of firms active in AI by category, 2018

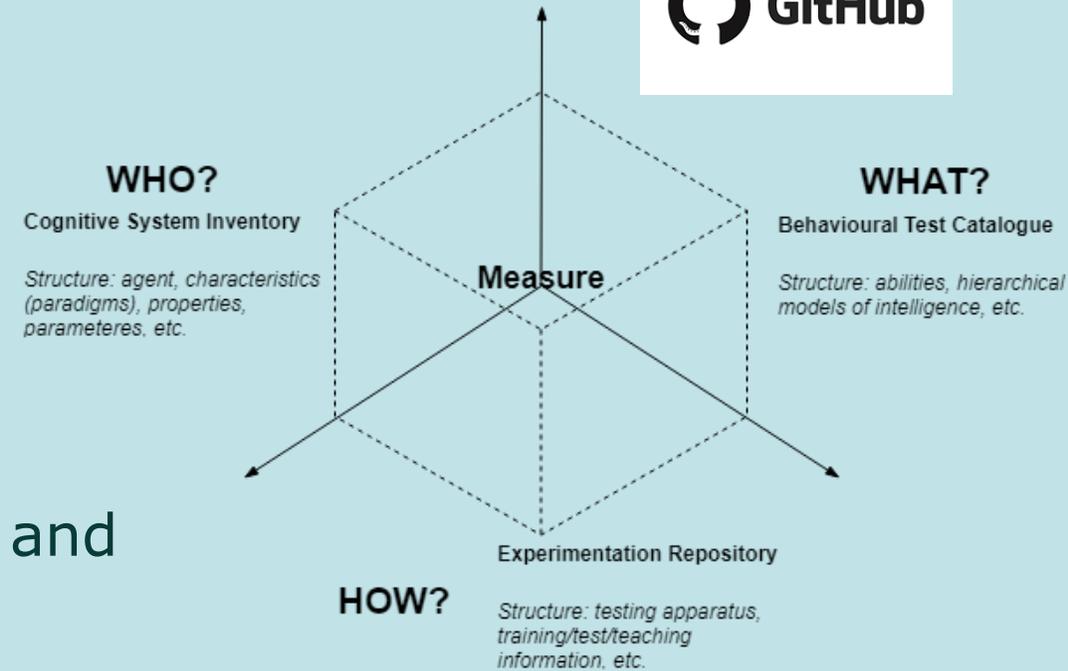
AI evolution analysis



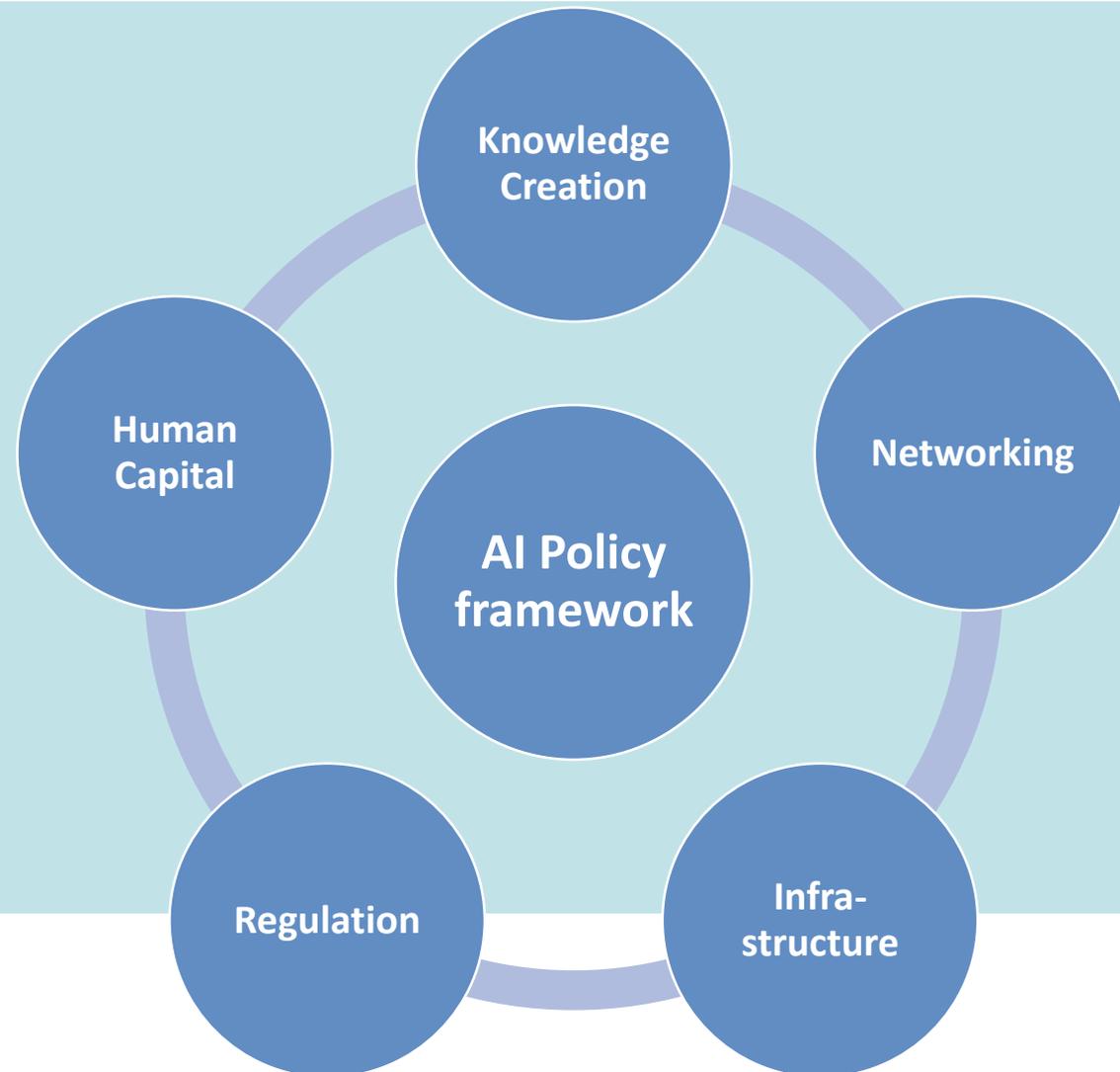
Collaborative initiative for the analysis, evaluation, comparison and classification of [A]I systems:

- Open data repository: scientific papers, benchmarking initiatives.
1800 Agents, 581 Tasks, 6720 Results.
- Data-driven critical review.
- Metrics → technology readiness level.
- Beyond accuracy: fairness, transparency and accountability of AI systems.

<http://www.aicollaboratory.org>



EU MS National Initiatives on AI





Thank You

- AI Watch Portal:

https://ec.europa.eu/knowledge4policy/ai-watch_en

- Email us: EC-AI-WATCH @ec.europa.eu