

# HUMANS IN CHARGE –

Steering the Al Age Responsibly

02/10/2023

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Gianluca Misuraca **Mastering Al** for Government In search of the governance "of, with and by AI"

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#### **Mastering AI for Government**

## Outline

- 1. Let's start from the future: Digital Europe 2040!
- 2. The key role of the public sector for "governing" Al
- 3. Harnessing the true power of AI for government
- 4. Turning away from dystopian futures: are we ready for it?

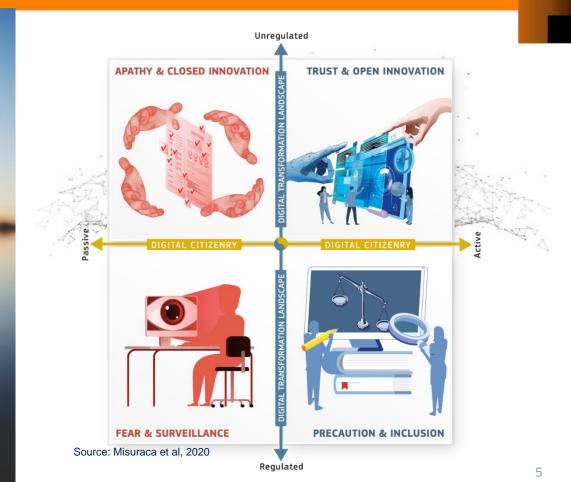


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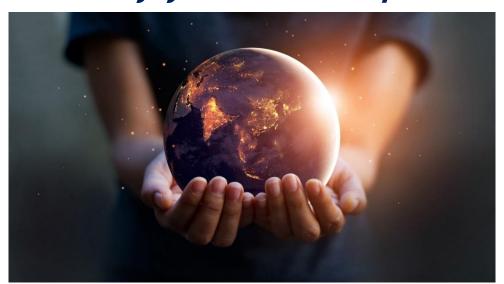


#### Shaping Digital Europe 2040





## A Scenario is a possible world... a world that does not have to be, but may yet come to pass...





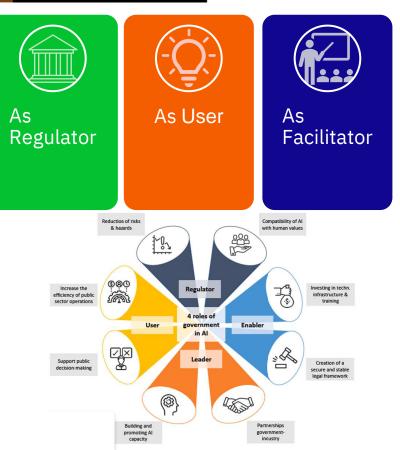
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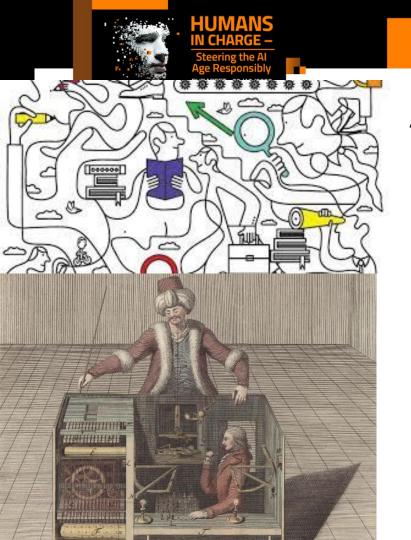
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#### Key role of the public sector for "governing" AI



- Ensuring framework conditions and limiting negative consequences of AI
- Deploying AI solutions to improve processes and provide better services
- Enable adoption of AI in society stimulating innovation and collaboration among stakeholders at local, national and global level
- Being a "trailblazer", leading the way as driver of societal change!?!



### Governance "of, with and by" AI

#### Addressing the policy-makers trilemma in the age of AI:

"the obligation to protect citizens from potential algorithmic harms is at odds with the temptation to increase efficiency and enhance quality of digital services"

- **Governance of AI:** the need to align with existing institutional mechanisms and cultural contexts
- Governance with AI: the need for humans to remain in control of a set of technologies that reinforce cognitive capacities, so to safeguard human rights
  - Governance by AI: the need to address the ethical implications of the true power of AI use, which emerges when human decision makers would "surrender" to the "superhuman" capacities of AI



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> BUSINESS AS USUAL

#### Al-enabled innovation in government

Incremental innovation

Al application in single organisational processes and services without a clear follow-up

e.g. text analysis of documents, predictive analytics without accompanying action, chatbots with very limited functionalities Organisational innovation

Change Ahead

Al application to alter existing practices, changing organisational processes and tasks of staff

e.g. robotic process automation, chatbots handling large amounts of requests, automatic decisions for declarations and similar Disruptive innovation

Al applications to social protection and care, creation of new public services to citizens based on Al, advanced chatbots with a variety of functions

e.g. social care data experiments (i.e. in Finland, UK, Denmark)



### Radical innovation



Al application for **large scale changes** in policy/governance practices, reform of policy/service creation models, reforms of organisations

<u>Planned - not in practice</u> e.g. AuroraAl in Finland, dispute settlement in Estonia, CitizenLab (BE)

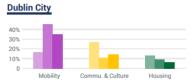
Source: Misuraca and van Noordt, 2020, JRC Science for Policy Report



### **Data-Driven Policy-Making**

- Detecting social issues more quickly
- Estimate effects of policy options
- Improve and fasten decision making
- Monitor policy implementation
- Evaluate "real time" policy impact
- Include citizens in policy-making
- Make policy-making more "legitimate"

#### Most discussed topics



Mobility dominated the civic conversation due to #VeloCity2019 and very proactive cyclists. The council's affordable Housing scheme stood out for Dubliners, as well as **Community**, which was higher in May due to the European elections.

> The Dublin Beat analyses citizen tweets





Object Detection, Amsterdam

CitizenLab to analyse Object I citizen input



#### **Enhanced internal management**

- Improve recruitment services
- Facilitate detection of frauds/mistakes
- Better allocation of resources
- Strengthen financial management
- Reinforce (cyber and physical) security
- Enable predictive maintenance services
- Innovate public procurement processes



Tengai interviewing job applicants, Sweden



VeriPol to detect false police reports, Spain



AI to detect anomalies in X-Road, Estonia

### **Better public service delivery**

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- Facilitate access to information and services
- Gather more accurate data and personalise services to different groups of stakeholders
- Empower civil servants and policy-makers through advanced decision support systems
- Automate redundant processes and reducing physical contact thus reducing risk of corruption
- Facilitate real time monitoring of service delivery
- Enhance quality of service delivery, thus strengthening trust in government
- Enable completely new services through AI, leveraging on innovative partnerships



Misty II to assist the elderly in Barcelona



BüroKratt AI, Estonian Government



JobBereik to assist in reskilling, VDAB, Belgium



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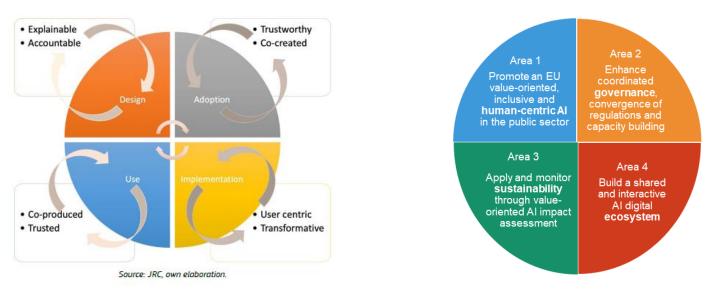
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- Beware of techno-solutionism: avoid thinking of AI as some sort of superagent able to do more or less everything
- **Be suspicious of ethical shortcuts:** if superficially handled, AI systems may infringe upon the principles of privacy and data protection
- Adopt a public value perspective: focusing on the effective implementation of AI to address the complex challenges government must solve
- **Be ready to handle disruption:** experimenting with AI considering both tangible changes in procedures, as well as a 'cognitive restructuring'
- Design new models of governance: rethink how services are delivered, data is managed, and the way algorithmic decision-making is implemented



*"For deeper and wider AI uptake to become a reality, Europe's public sector should have access to adequate funding and be equipped, skilled and empowered to conduct strategic and sustainable purchasing and adoption of AI-based systems" (JRC, 2022)* 

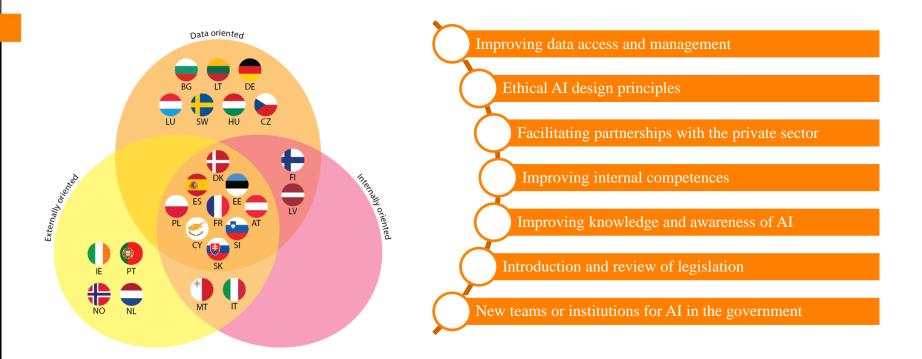


Source: JRC Technical Report, 2021, Molinari F., et al. https://publications.jrc.ec.europa.eu/repository/handle/JRC126665



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#### Key strategic actions to boost AI in government





- Only half of all countries worldwide (94) have adopted overarching, crosssectoral digital policies or strategies (ITU, 2023):
  - Less than 5% of countries worldwide only 9 countries are currently equipped with mature national frameworks for digital markets geared at transformational development of digital economies and societies;
  - and just 30% of countries globally have made progress in establishing advanced national digital policy, legal and governance frameworks

#### • "Government should have the right skills for the digital future".

- The success of digital transformation depends on equipping senior business leaders to make informed decisions and acquiring and keeping enough skilled specialists on board" (UK, NAO, 2023)





- Design a world-class international master on AI in public services 1. rooted in blended learning and project-based work
- 2. Develop an ecosystem and network of excellence on AI for government across the EU
- 3. Establish an EU Knowledge Hub of Excellence on AI for the public sector recognized worldwide



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The AI4GOV Project is co-financed by the EU











#### **Training "functional specialists" on AI4GOV**





Master in Artificial Intelligence for Public Services



UNIVERSIDAD POLITÉCNICA DE MADRID







Governance and policy aspects of Al



Human-centric principles for Al systems and service design



Focus on use cases of Al in the public sector

Technical knowledge in on-demand AI techniques



Networking with a worldclass executive group

Integral curriculum teaching the technical, service design and policy aspects of applied Artificial Intelligence in the public sector

https://ai4gov-master.eu



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#### ...to start diving into the future of Al....

