#### THE CULTURE OF TRUSTWORTHY AI

AI4EU

Venice 2-3 September 2021

Working Groups

# A European Survey on Al and Ethics.

Key factors in building AI trust and awareness across European citizens.

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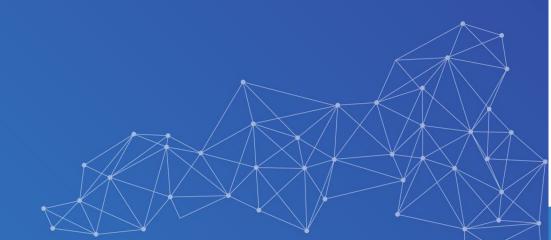
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# --- Introduction ---

# The working group

The goal of this group is to understand and increase people's awareness of Al capabilities and ELSEC issues.

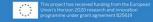


## **About us**

Participants: 6 participants from interdisciplinary area (CS, Philosophy, HCI, Communication, Engineering. Psychology)

**Meetings:** 12 Nov 2020 – ongoing. 1-2 meeting at months

**Activity**: Citizen consultation survey



## Our contribution

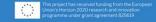
We try to fill a gap by create a survey:



 That gathers the opinion and represents the EU on AI.

 That assesses citizens' awareness of recent EU initiatives (GDPR, Ethic Guidelines etc.)

 Offers insights of citizens' priorities and opinion of Al







# **Our categories**

We defined three key-factors relevant to investigate:

#### **AI AWARENESS**

A set of questions to analyze people's **self-reported knowledge of Al** and understanding of **its impact on their life.** 

#### 7 items

#### **AI ATTITUDE**

A set of questions focuses on the citizen' **approach toward AI** and their interest to **improve their current knowledge** on the subject.

#### 5 items

16 Questions total

#### TRUST IN AI

A set of questions to assesses the **trust of citizens towards Al** and possible **entities to ensure its correct use**.

4 items





# **Countries Involved**

Italy **Germany** 

Romania **Spain** 

**Poland France** 

**Netherlands** Sweden









# Our sample

Age span

18-34 y.o •••

35-54 y.o. • • • • •

55-75 y.o

Balance age Age 18-75



4000 people

Balance regions in countries

Balance gender

# Our definition

Artificial intelligence (AI) refers to computer systems that can perform tasks that usually require intelligence (e.g. making decisions, achieving goals, planning, learning, reasoning, etc.). AI systems can perform these tasks based on objectives set by humans with a few explicit instructions.





# Al Competence

Q. When it comes to Artificial Intelligence (AI) and its impact on society, I feel my competence on the subject would be:

A. Expert, Advanced, Intermediate, Basic, Almost none.

Inexperienced:Knowledgeable ratio



**18-34 y.o.** 0.9

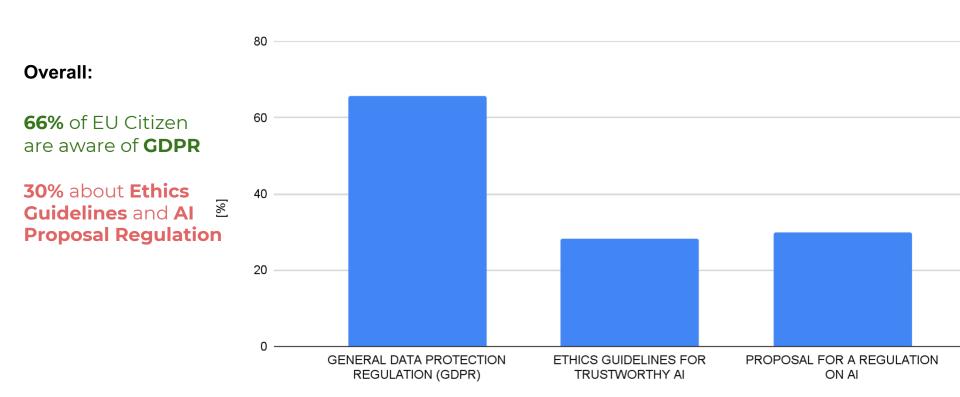
**35-54 y.o.** 2.6

55-75 y.o.

5.8

# Q: Have you ever heard about the following European initiatives regarding AI?

# **EU Initiatives**



# Impact on daily life

Q: To what extent do you feel Artificial Intelligence (AI) and its applications impact your daily life already?

A. A lot, Somewhat, So and so, Not so much, Not at all.

Impacted:Indifferent ratio



1.8

3.2





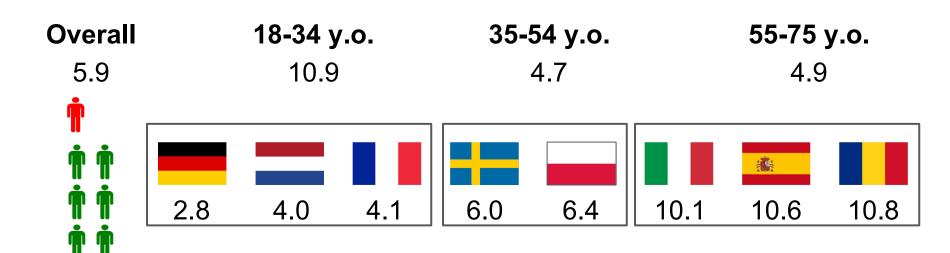


# **Attitude toward AI**

Q. How would you describe your attitude towards Artificial Intelligence (AI) and its applications?

A. Strongly approve, Approve, Indifferent, Disapprove, Strongly Disapprove.

# Approving: Disapproving ratio

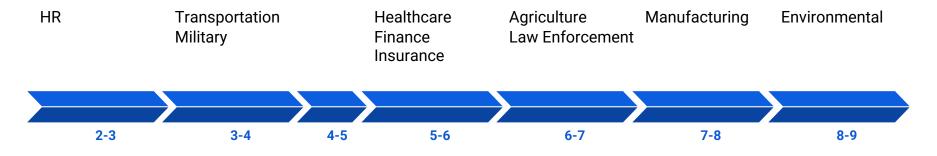


# Al Approval by Sector

Q. How would you describe your attitude towards the use of AI in Europe in the following sectors?

A. Strongly approve, Approve, Indifferent, Disapprove, Strongly Disapprove.

# Approving: Disapproving ratio



Al in general: 5.9

# Al Approval in Specific Scenarios: Job Application











Comfortable: Uncomfortable ratio = 1.7

Q: To what extent do you feel comfortable with this process?

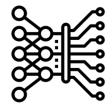
A: Very comfortable, fairly, neutral, not very comfortable, not at all.

# Al Approval in Specific Scenarios: Smart Meter

Consumption

**Advice** 







Comfortable: Uncomfortable ratio = 4.2

Q: To what extent do you feel comfortable with this application?

A: Very comfortable, fairly, neutral, not very comfortable, not at all.

# 03 Results -Trust in Al

# **Trust in Specific Entities**

Q. How much do you trust the following entities in ensuring that AI is in the best interest of the public?

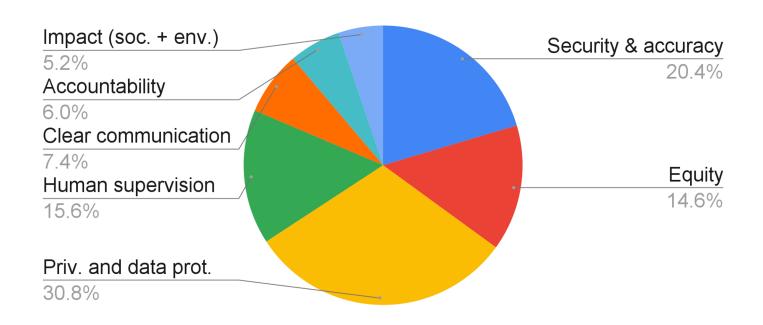
A. A lot, somewhat, so and so, not so much, not at all.

### Trusting: Skeptical ratio



# **Priorities**

Q. With respect to the previous scenarios, which of the following aspects should an organisation developing or using Al consider more?



Over 66% of citizens are aware of GDPR.

# 04 — Discussion —

# **Key Takeaways**

- EU citizens don't feel knowledgeable on AI and its impact on society.
- They mostly approve of Al and its applications in different sectors; the degree of approval varies by sector and is heterogeneous across the surveyed countries.
- Privacy and data protection is a fundamental driver for trust and approval.

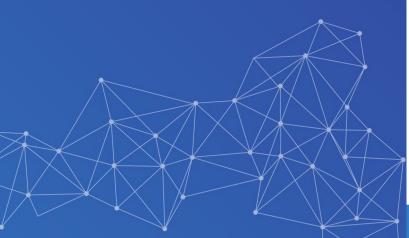


# Thank you!

# BUILDING THE EUROPEAN AI ON-DEMAND PLATFORM



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 825619





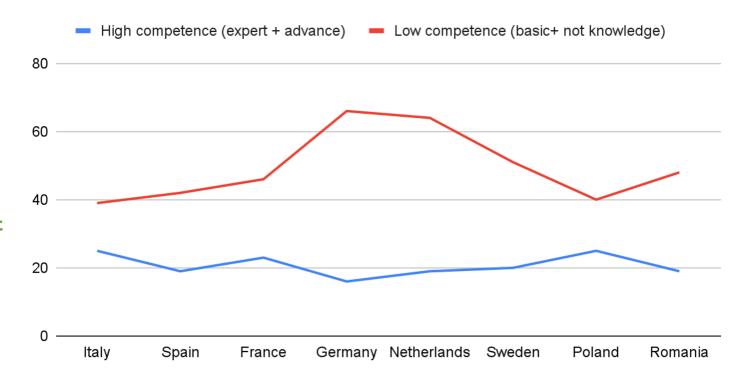
# **Al Competence**

Q. When it comes to Artificial Intelligence (AI) and its impact on society, I feel my competence on the subject would be:

#### **IN GENERAL:**

50% don't feel competent on Al and ethics

20% feel competent on AI and ethics

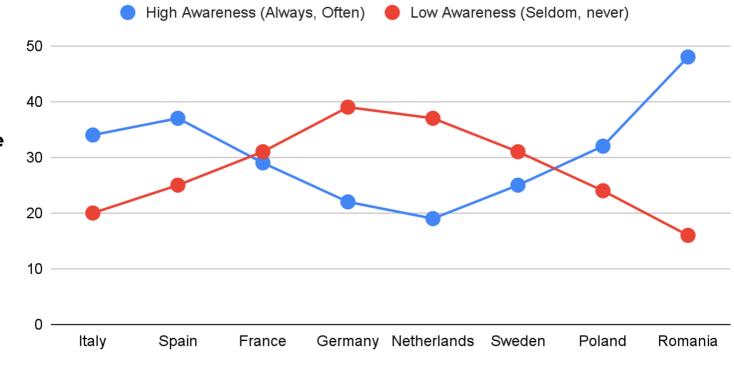


# Al Interaction

Q. How often are you aware of interacting with a product/service based on or including AI?

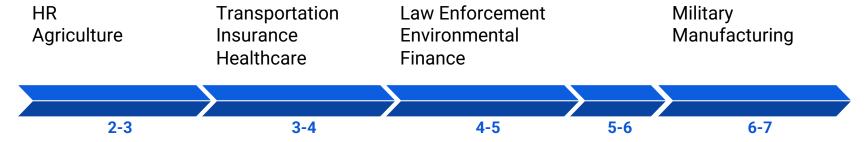
#### IN GENERAL:

Around **30%** of population reported to be **aware/unaware** of interact with Al



# Al Awareness by Sector

Q. To what extent do you think AI is used in each of the following sectors in Europe?



Aware: Unaware ratio

Q: To what extent do you think AI is used in the following sectors?

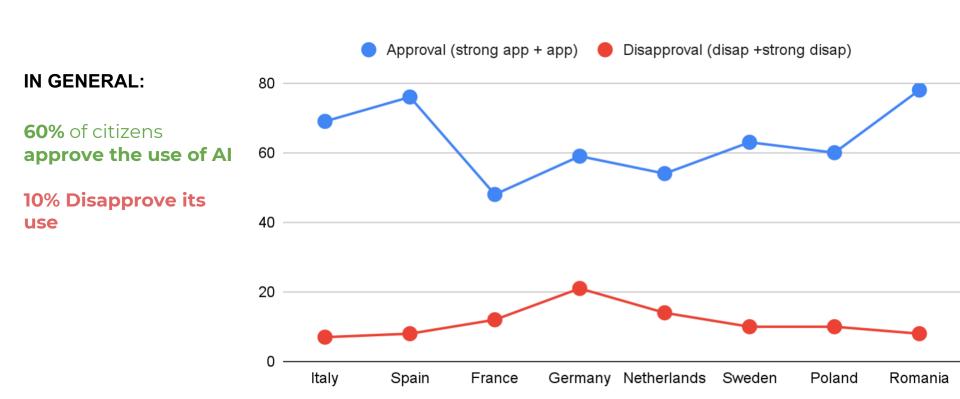
A: A lot, somewhat, so and so, very little, not at all.





# **Attitude toward AI**

Q. How would you describe your attitude towards Artificial Intelligence (AI) and its applications?



#### The Scenarios

We asked how comfortable the participants feels in two different context in which AI was used:

#### **Recruitment Process**

You are applying for a job. The AI software scan your resume to assigns you a score that will decide which candidate pass to the interview. This is stated make the process objective and the company ensure the data are anonymized and any personal data used.

#### **Smart Meter**

Imagine to use a smart meter to reduce the home energy consumption and cut utilities. The company promise your data is anonymized and not personal information are shared with third parts.



#### The Scenarios

Our findings:

Netherlands, Germany and France citizens were the most sceptical of use AI in both scenario

Romanian citizens were the more comfortable

#### **Smart Meter**

59%

Citizens comfortable to use a Smart Meter

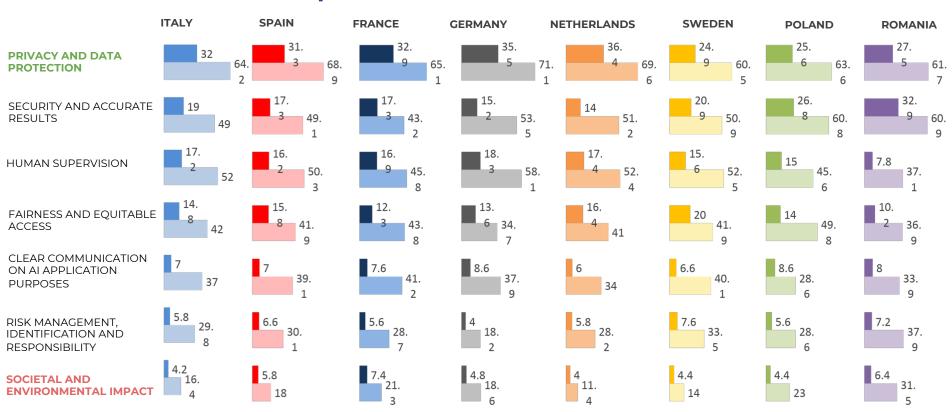
#### **Recruitment Process**

45%

Citizens comfortable with the process

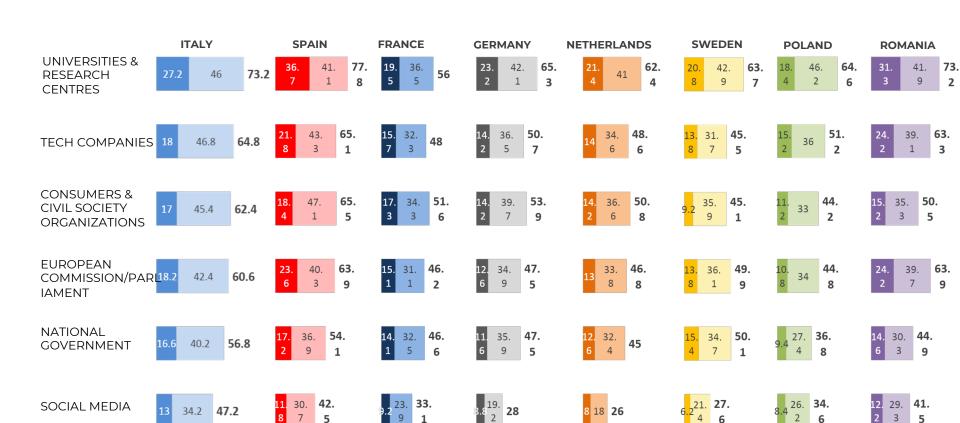
# **EU Ethical Principles**

Q. With respect to the previous scenarios, which of the following aspects should an organisation developing or using AI consider more?



# Al Governance

Q. How much do you trust the following entities in ensuring that AI is in the best interest of the public?



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#### **IN GENERAL:**

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