We, the Internet

MISSIONS PUBLIQUES
Bringing citizens into policy

Consortium for Science, Policy & Outcomes
at Arizona State University

Welcome to the Global Citizens' Dialogue on the future of Internet

Happening in 77 countries, the largest citizens' deliberation to date

#WeTheInternet

AGENDA

Day 1 : Saturday, October 24

SESSION 1 (25 minutes)

- Introduction

SESSION 2 (55 minutes)

- Internet and Me

BREAK (10 minutes)

SESSION 3 (90 minutes)

- My data, your data, our data

BREAK (10 minutes)

SESSION 4 (45 minutes)

- A strong Digital Public Sphere - 1

Day 2: Sunday, October 25

WELCOME (10 minutes)

- Introduction, Reflections

SESSION 5 (50 minutes)

- A strong Digital Public Sphere – 2

BREAK (10 minutes)

SESSION 6 (90 minutes)

- Exploring Artificial Intelligence

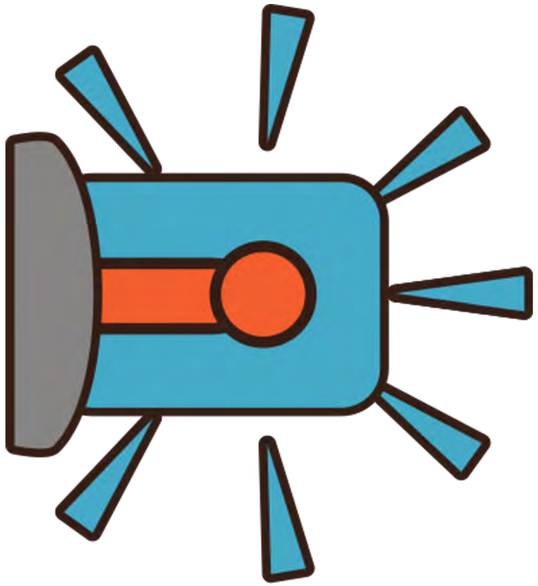
BREAK (10 minutes)

SESSION 7 (50 minutes)

- Internet for and with the citizens

CONCLUSION (15 minutes)

Code of conduct



RESPECT OTHERS' OPINIONS AND IDEAS

Everyone's opinion is valued! Listen carefully to others and allow one person to speak at a time. Mute until it is your turn to speak.

THIS IS A CONVERSATION, NOT A DEBATE

It's okay to disagree but be respectful! Give everyone a chance to speak.

TAKE SHORT BREAKS WHEN NEEDED

Let the conversation continue.

BAD BEHAVIOR WILL NOT BE TOLERATED

Attacking someone for their looks, race, gender, orientation, beliefs and ideas is not acceptable. This is a safe space for everyone.

SESSION STRUCTURE

Session Structure

The next 6 discussion sessions will follow a similar format.

- **Introductory Video.** These short videos will provide information about the topics and share perspectives from around the world.
- **Information Briefing from Facilitator.** Your facilitator will explain more concepts to make sure everyone is on the same page.
- **Discussion.** Discussions with your fellow participants are the main part of each session.
- **Questionnaire.** At the end of the session, you will fill out a short survey to share your thoughts anonymously.

Internet and me (55 minutes)

What is the Internet?

The Internet was invented by scientists who wanted to link their computers to one another, becoming a network of networks.

They soon began to discover the broader potential of this early project. They **found a way for computers and individuals to share information.**

The Internet was built to foster resilience in the network (if one piece breaks, not everything breaks) as well as to maximize freedom of choice for individuals - about what to send and what to receive.

What is the World Wide Web?

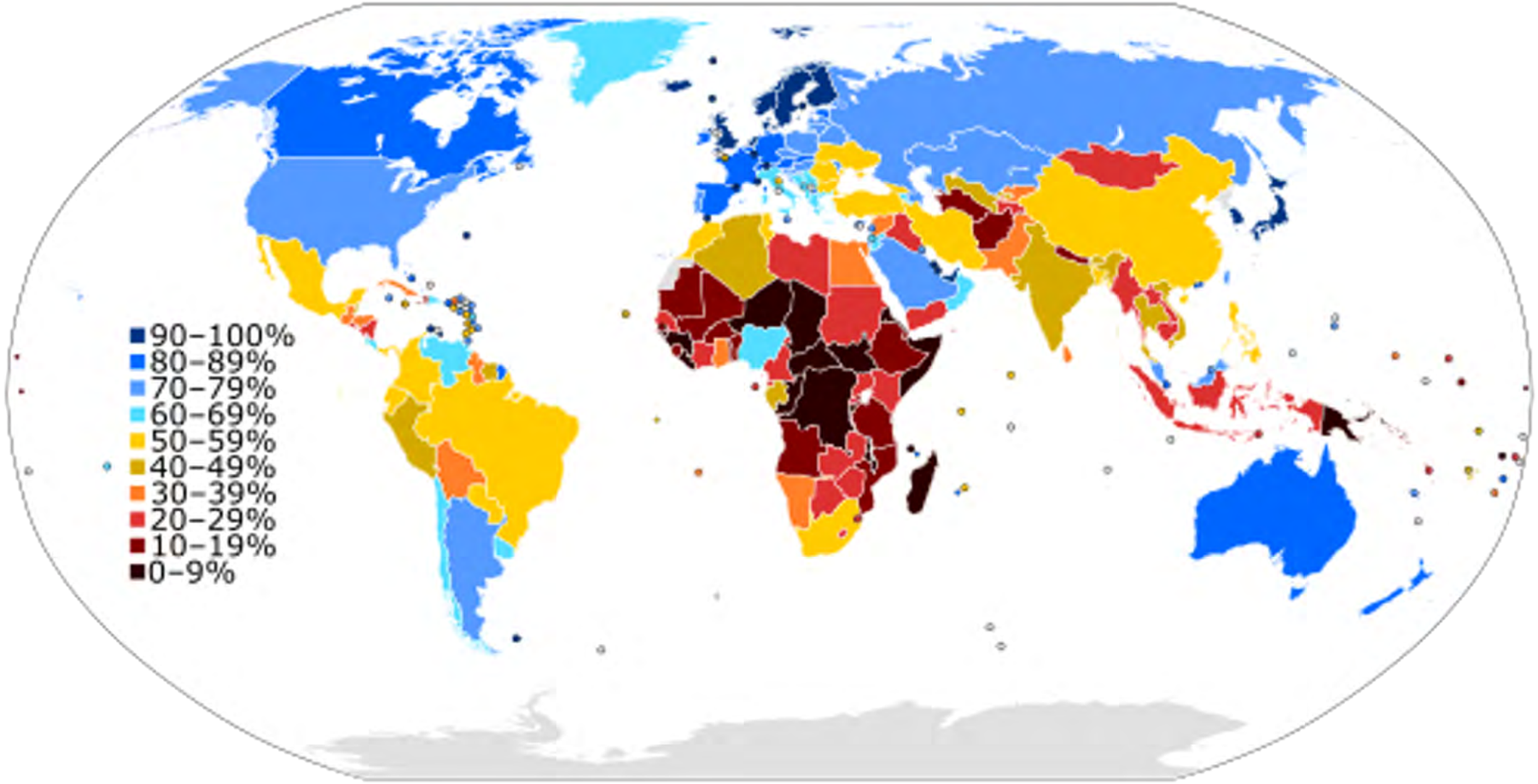
What is the difference between the Internet and the World Wide Web?

The words “Internet” and “World Wide Web” (www) are sometimes used interchangeably. In reality, they mean different things. The **Internet is the infrastructure which connects everything together**; the **www is one of many Internet applications that we use to communicate**, access websites, etc.

Think of the postal system: the Internet is similar to the network of post offices and letter boxes, while the www is similar to the letters and parcels we send via the system. At the same time, the www is probably the application that made Internet use grow exponentially.

What happens on the Internet in 60 seconds

Percentage of Internet users per country (in relation to the inhabitants/country):



Who makes the Internet work?

United Nations	UN
Regional International organizations	European Commission African Union Association of SouthEast Asian Nations, etc.
National Governments	Germany, China, Russia, Fiji, etc.
Local Governments	Cities, Regions, Federated states
Private sector / Companies	Tech platforms, Small and medium enterprises
Citizens like you	**You!**
Civil Society	Organizations like the Internet Society or the Red Cross
Research Community	Universities, Research Centers
Technical community	Organizations that manage core Internet infrastructures

SESSION 3

My Data, Your Data, Our Data

(90 minutes)

What story does data tell about us?

What our behavior tells

What we share

- Links sent
- Email address
- card expiry date
- emoji used
- people tagged on
- gender
- birth date ...

- Time zone
- ads viewed
- shopping patterns
- typing speed
- device location
- SMS history
- phone calls history ...

What the machine sees about us

- Dieting
- Real estate
- Cat owner
- New job
- IQ level
- Income level
- Political affiliations
- Away from hometown
- Customer type such as Conscious Shopper or Compulsive Shopper
- Newly engaged...

Different ways to see data

1. **Data as a resource that can be owned:** Data is a resource that can be exploited. It can be owned by a person or a company. It can be produced, extracted, sold, bought.
2. **Data as Labor:** When you post things online, or share images, you are performing a small job (the creation of data)
3. **Data as our personal reflection:** You are reflected in data about you: Your relationships, your behavioral patterns, your preferences. Data is an online “you.” So it should come with basic Human rights.
4. **Data as infrastructure:** The increasing importance of Data for the functioning of society has changed its nature: It can now be seen as part of the core infrastructure upon which other services and products are built.

A strong Digital public sphere

(PART 1 - 45 minutes)

What is the Public Sphere?

The Public Sphere is a place that brings together individuals who discuss matters of general interest.

It is a space for the **dissemination of opinions** which also allows the individual to inform himself and form his opinion.

The arrival of the Internet has profoundly changed this Public Space. It has brought it online and multiplied its visibility.

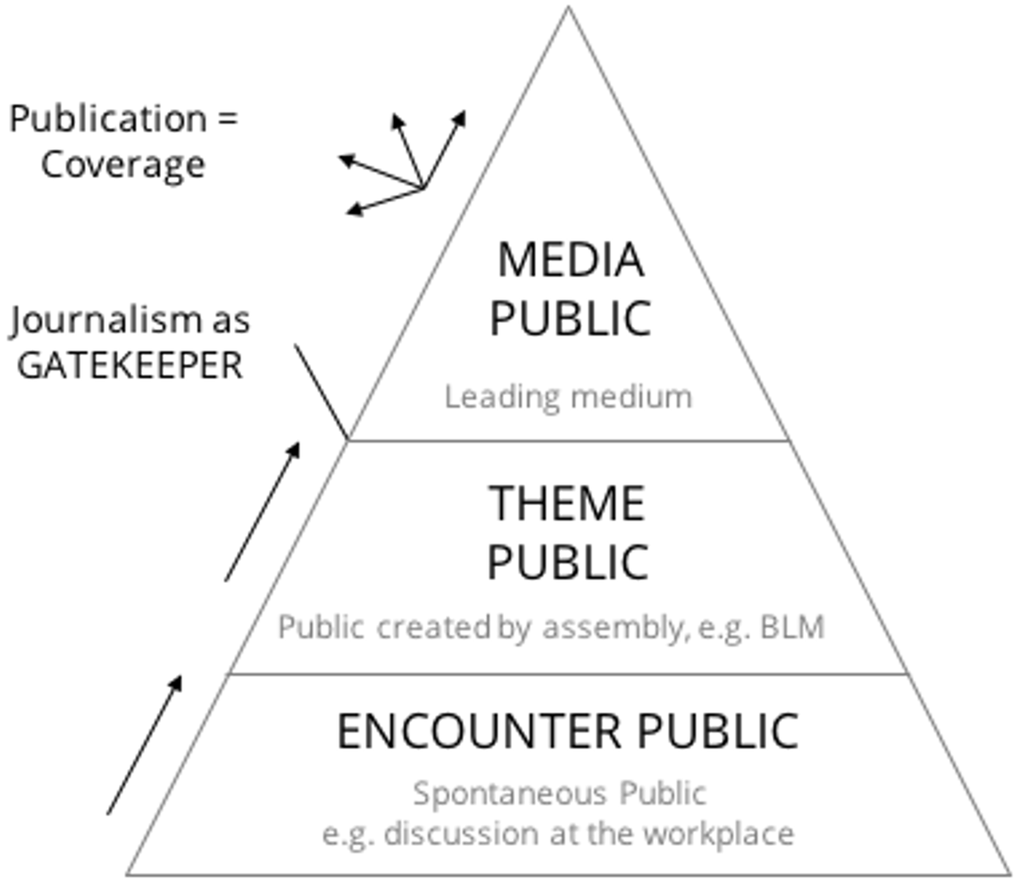
A tremendous opportunity

Never before in the history of mankind have we had access to so much information. And the way we access this information has changed tremendously.

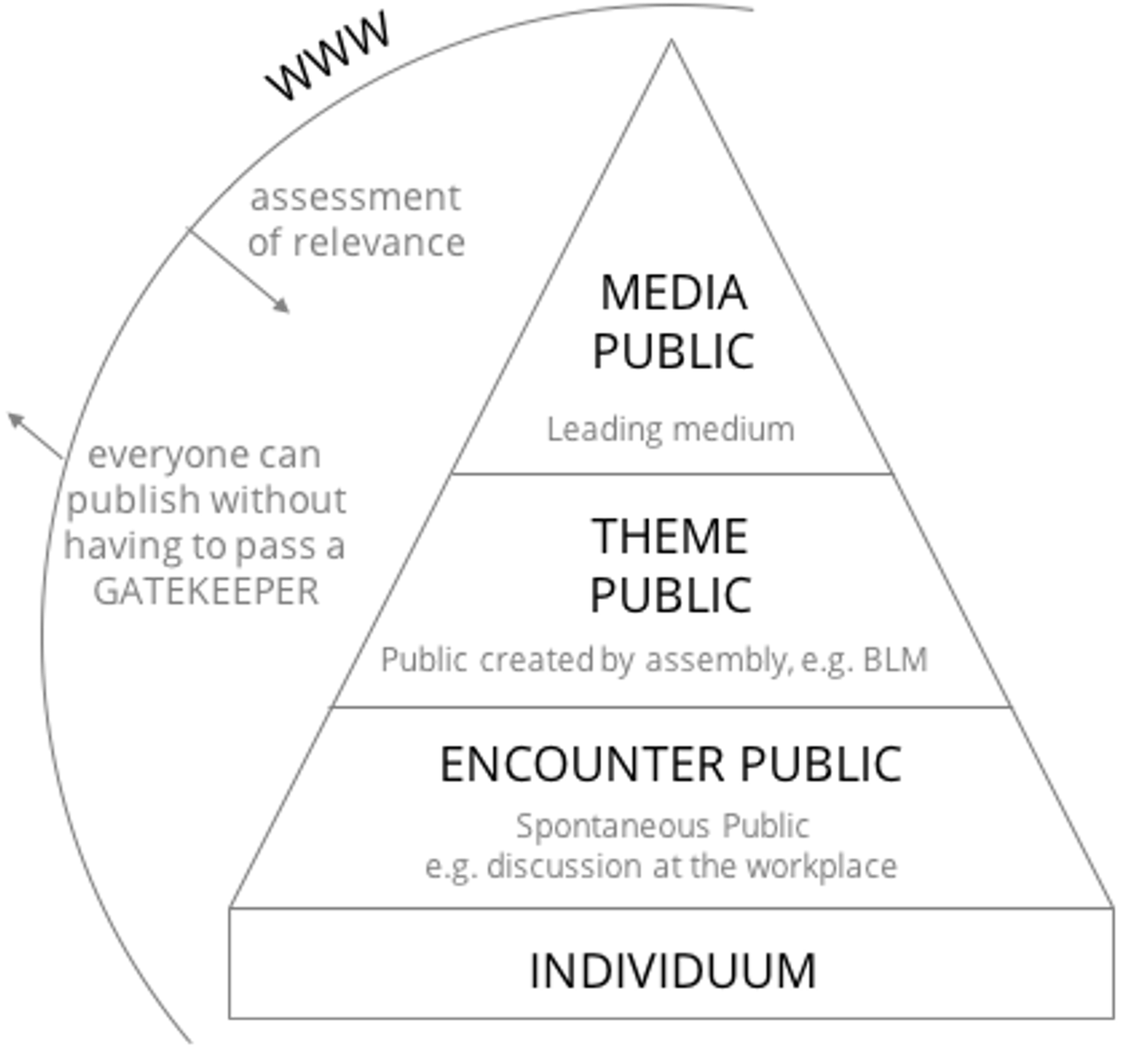
The number of videos, books and stories we can see, read and listen to has exploded. We select what, when and on which device we see and read news and learn new information about the world and others in it.

We interact with other citizens, with our government, with companies and all kinds of organizations directly and with almost no filter. This has not always been the case.

The Physical Public Sphere vs the Digital Public Sphere



Public Sphere
Pre-Internet Age of Classical Mass Media
Level-Model by Friedhelm Neidhard



Digital Public Sphere

A strong Digital public sphere

(PART 2 - 50 minutes)

LEARN

Fake news

A term made popular by some politicians and news anchors to refer to non-factual information. Most experts recommend against using this umbrella term since it does not account for intentions and is often used to undermine journalists (UNESCO)

Misinformation

False information that is spread, regardless of whether there is intent to mislead (dictionary.com)

Disinformation

Deliberately misleading or biased information; manipulated narrative or facts; propaganda (dictionary.com)

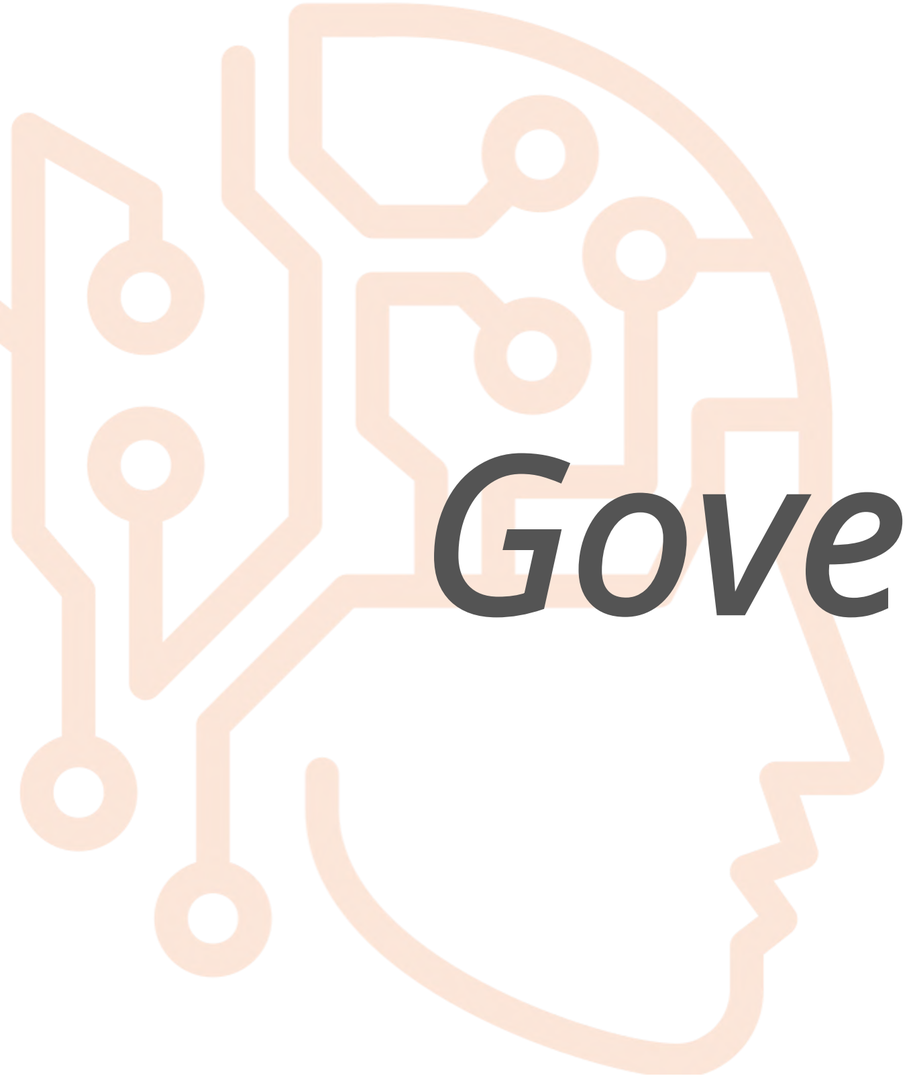
Freedom of expression

Freedom of expression: The power or right to express one's opinions without censorship, restraint, or legal penalty.

Overview of solutions to fight disinformation

SESSION 5

WHAT / WHO	Education and empowerment: Users learn how to handle the information flow	Making sure that the content is of high quality, prevent disinformation from spreading quickly		Law: Have a legal instrument e.g bill, international treaty, etc.	Recourse: Enable user to file legal complaints	Sector led commitment: Organization engage themselves to be proactive
		Human based intervention	Technical intervention			
Public bodies: Governments at national level, international organizations like UN or European Union, Local Governments	Literacy programs in schools and other educational institutions	Create / fund independent agencies for oversight	Setting rules/frame for automated filters	Pass laws and sign international treaties, e.g. EU General Data Protection Regulation (GDPR), National Law in Germany for filtering, Brazilian law on Information	Strengthening consumer protection regulation Open possibility for users to put a complaint	Digital Charter: Guiding principles on how to ensure healthy discussion online
Private sector: Companies, social media platforms, Developers of software,	Video Tutorials and banners “Positive nudging” to encourage users to share accurate, credible information	Team of fact checkers that monitor the content Dedicate trained and qualified staff	Algorithms that filter suspicious content Tools to prevent virality (for example limitation of number of reshare) Promote reliable content	Contribute input for law making	Implement the legal standards Increase user protection, e.g. through privacy by design / standard setting	Update of terms of services to prevent spread of disinformation.
Civil society at large: Research and academia, Journalists and media, individuals	Education programs in media; awareness campaigns	Journalists and media check the quality of the content Initiatives like Poynter User can report/flag content	Monitoring and observing algorithms Making sure filters are fair	Contribute input for law making	Legal advice and support to file lawsuits	Digital Charter



SESSION 6

Governing Artificial intelligence (90 minutes)

Application Areas

LEARN

- Speech Recognition
- Personalization
- E-Mail Filtering
- Applicant Screening
- Clinical Diagnosis

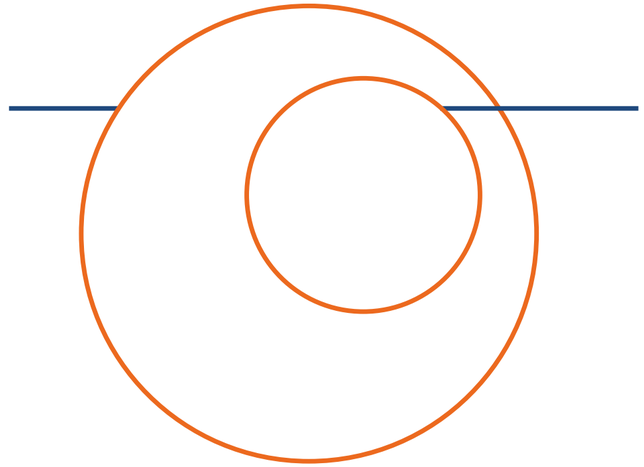
Do you know any other AI Application Fields or Applications using AI?

Defining AI & ML

LEARN

Artificial Intelligence (AI)

AI can be described as “a technique that enables computational systems to mimic any type of intelligence”. Simplified, this means that a machine is capable of solving specific problems. **Today, only very well defined problems can be solved by AI systems.**



While most people talk about AI, the current hype actually refers to ML. For simplicity reasons, you may call it as you like.

Machine Learning (ML)

ML is a particular type of AI. ML refers to algorithms and techniques that learn by themselves when confronted with data, observations and interactions with the surrounding world. This means that ML algorithms are able to develop their own rules, by constructing a statistical representation of the environment given to them. This characteristic **enables us to use computers for new tasks that otherwise would have been too complicated or even impossible to code manually**.

The ML Process (1)

LEARN

While there are several ML methods, we will go through **one exemplary method** in order to introduce some **processes usually involved**. In general, the simplified ML process of the exemplary method chosen can be split up in two phases: **Training** (this slide) and **Deployment** (next slide).

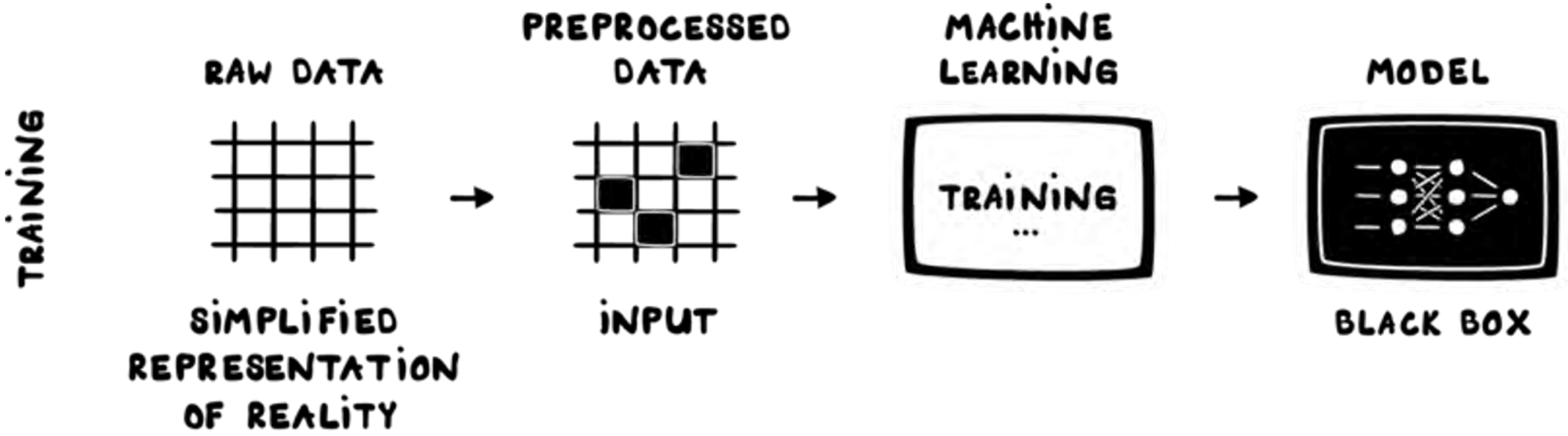


Illustration: Chiara Ullstein

Collection of data by people (surveys, pictures, etc.) or automatically collected or generated by computers

Identification & preparation of relevant data

=

training data

Identification of patterns in the input data via a statistical approach by the **learning algorithm**

Creation of a new algorithm as result of the training process

=

ML model

The ML Process (2)

LEARN

Here you can see the deployment phase of the simplified ML process. This phase describes the application of the ML model in the real world.

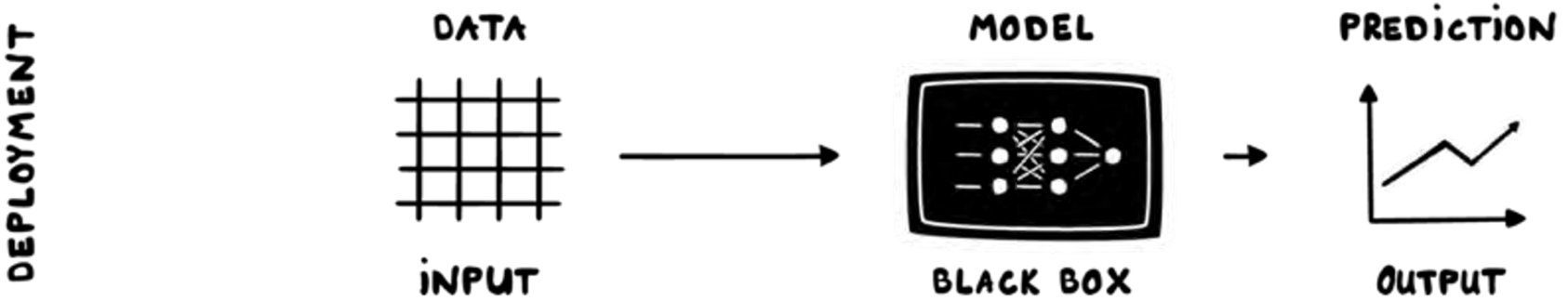


Illustration: Chiara Ullstein

After the model has been trained, it can be deployed. For this deployment phase, new data is taken as input. Then the magic of prediction happens: The model that you have trained makes a prediction about the new application area. Here, it is important to remember that any prediction will always be based on the patterns found in the training data during the training.

Some Challenges

ML applications can be found basically everywhere. They are of huge support and help to make life easier. However, ML-made decisions (or suggestions for decisions) can also have serious impacts on people's lives. Because ML models can become very complex, they offer many sources of error.

Potential sources of error during the ML process, e.g.:

→ Data collection: incorrect/ biased collection, wrong data documentation.
→ Data preparation: incorrect filtering of relevant data.
→ The training process: programming, selection of algorithm parameters.
→ Deployment of ML model: new context not suitable for trained ML model.
→ Interpretation of results: misinterpretations.

Effects of errors and other challenges:

→ Can data as representation of given environment ever be perfect? Especially for data on society, bias in training data (e.g. little representation of minorities) will be learned by the learning ML algorithm and is then also reflected in the final prediction. This could cause discrimination through AI-based decisions.
→ ML models can become very complex and AI decisions hard to understand. The lack of transparency may lead to a lack of accountability and liability.
→ Loss of autonomy of users.

Towards AI governance

AI applications can be found basically everywhere.

The discussion on how to take decision on AI (governance) is still at an early phase and discussions that include all **stakeholders, including industry, governments and users, are highly needed. This is why your input is crucial.**

On the next slides, we present you one set of recommendations that has been developed by UNESCO.

UNESCO is a UN organization with global coverage and works on AI.

Having your input on these policy recommendation will feed the discussion and decision making on AI.

UNESCOs Policy recommandations on AI

1. Promoting Diversity & Inclusiveness
2. Addressing Labour Market Changes
3. Addressing the social and economic impact of AI
4. Impact on Culture and on the Environment
5. Promoting AI Ethics Education & Awareness
6. Promoting AI Ethics Research
7. Promoting Ethical Use of AI in Development
8. Promoting International Cooperation on AI Ethics
9. Establishing Governance Mechanisms for AI Ethics
10. Ensuring Trustworthiness of AI Systems
11. Ensuring Responsibility, Accountability and Privacy

#1 Promoting Diversity & Inclusiveness

Description

Diversity and inclusiveness means that everyone should be included in the design and functioning of AI.

This policy aims at making sure that there is no discrimination when using AI. Particularly based on cultural and social stereotypes and inequalities.

This policy puts a focus on making sure that local and international cultural differences and norms are considered.

#2 Addressing Labor Market Changes

Description

AI will bring massive changes on the labor market.

This policy aims at making sure that adequate educational programs for all generations are offered to adapt to this evolution.

To forecast future trends, researchers should analyze the impact of AI on the local labour market. Corporations, NGOs and other stakeholders should strive to achieve a fair transition of employees most likely to be affected by changes in the labour market.

#3 Addressing the Social and Economic Impact of AI

Description

To prevent inequalities, Member States should prevent that any actor has a monopoly. Be it for research, technology, data, or market. A monopoly is a situation in which one actor is dominating without competition a field.

Member States should run impact assessments of AI on society and should encourage private entities to also launch impact assessment.

Additionally there should be a plan to ensure that training data is of good quality.

#4 Impact on Culture and on the Environment

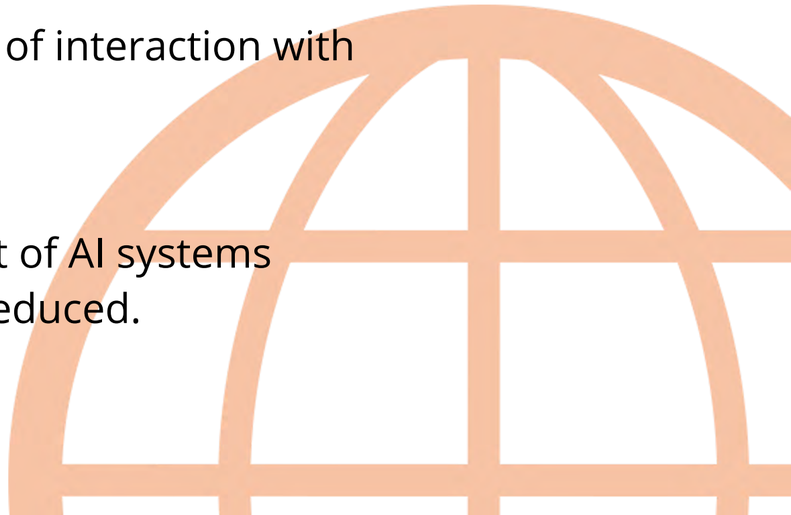
Description

AI systems should help to preserve, enrich and understand culture.

Actors should research how AI systems such as voice assistance or automated translation influence human language

Also the long term effects of interaction with AI should be researched.

The environmental impact of AI systems should be assessed and reduced.



#5 Promoting AI Ethics Education & Awareness

Description

Simply put, ethics is concerned with what is good for individuals and society. When we talk about AI ethics it comes to develop and use a set of rules that make sure that AI is used for the good of society and individuals.

“AI Ethics education” means that “AI ethics” should be embedded into schools and universities programs.

Moreover, it should be researched how AI can be used in teaching. People with disabilities, people from diverse races and cultures as well as women should especially be promoted to participate.

#6 Promoting AI Ethics Research

Description

Member States should invest in research in AI ethics or incentivise investments by the private sector.

The inclusion of ethical considerations in the design of AI research and the final product should be ensured.

The scientific research should be supported by both Member States and industry by facilitating the access to data.

Also gender diversity in academic AI research and industry should be promoted.

#7 Promoting Ethical Use of AI in Development

Description

The ethical use of AI should be encouraged by Member States.

Together with international institutions, they should strive to provide platforms that allow for international cooperation on AI development (infrastructure, funding, data, domain knowledge, expertise, workshops).

Furthermore, networks and research centers for international collaboration of AI research should be promoted.

#8 Promoting International Cooperation on AI Ethics

Description

Member States should conduct AI ethics research through research institutions and international organizations.

All entities should ensure equal and fair application of data and algorithms.

International cooperation should be encouraged to bridge geographical differences or particularities.

#9 Establishing Governance Mechanisms for AI Ethics

Description

The system to make decisions on AI should be:

Inclusive: Participation of diverse people of all age groups

Transparent: Oversight, fact-checks by media, external audits

Multidisciplinary: Holistic examination of issues)

Multilateral: International agreements).

An international legal framework could be developed and implemented to foster international cooperation between countries and other stakeholders.

#10 Ensuring Trustworthiness of AI Systems

Description

Clear requirements for transparency and explainability (how does it work?) of AI systems should be set.

Therefore, research on explainability and transparency should especially be promoted by Member States through extra funding.

Moreover, the development of international standards for levels of transparency should be considered in order to enable an objective assessment.

#11 Ensuring Responsibility, Accountability and Privacy

Description

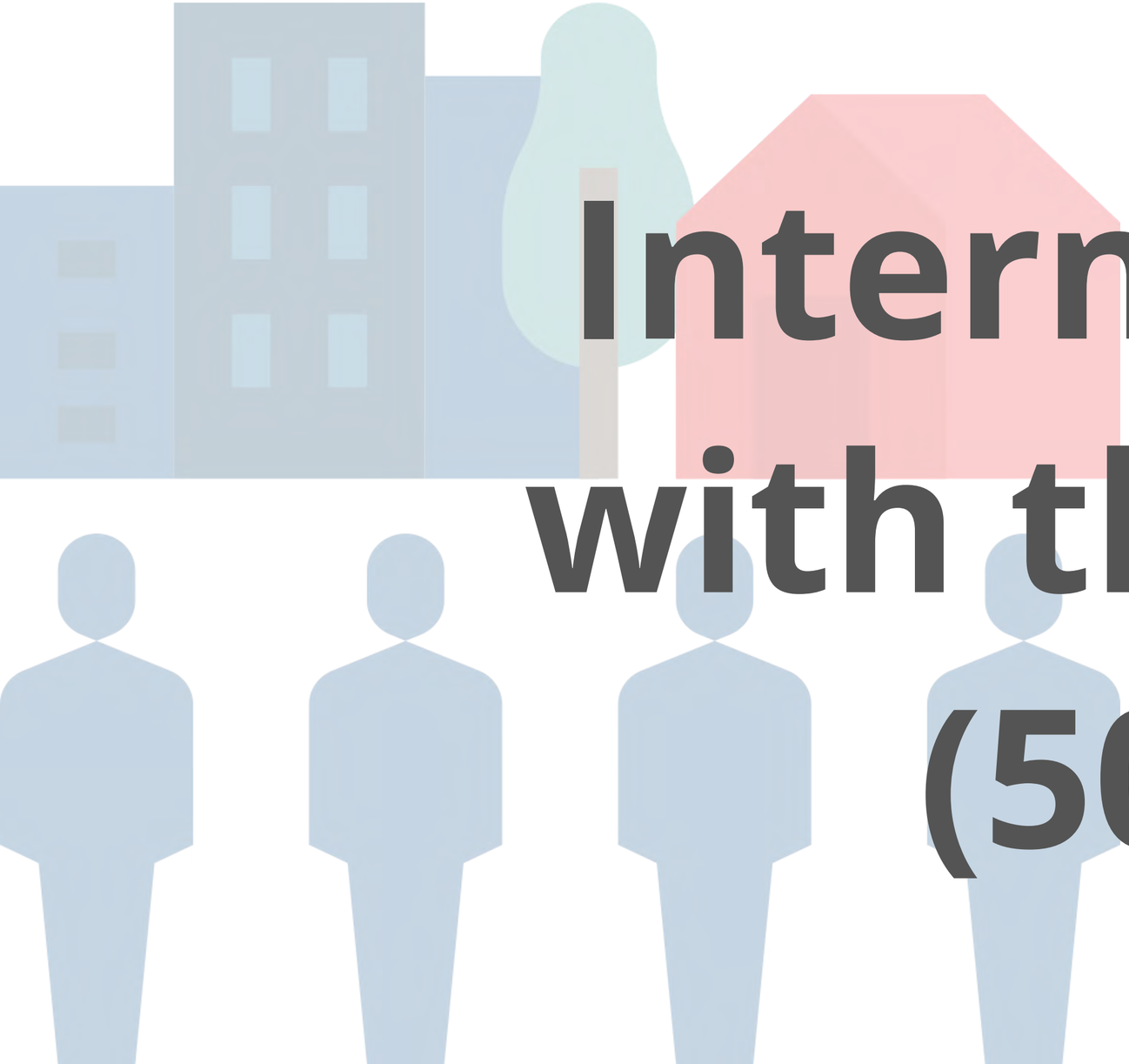
Actors should ensure that there is a system to be sure that we know who is responsible over AI-decisions.

Harms caused by AI systems should be invested, redressed and punished.

Furthermore, the fundamental right to privacy should be secured through appropriate measures and individuals should be able to take advantage of the concept “the right to be forgotten”, which includes the possibility of overseeing the usage of one's own private data and the option to delete it.

Finally, a Commons approach to data should be adopted. This would promote interoperability of the data sets and allow high standards in overseeing collection and utilization.

SESSION 7



Internet for and with the citizens (50 minutes)

REMINDER: Who makes the internet work?

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Citizens like you	You!
Civil Society	Organizations like the Internet Society or Red Cross
Research Community	Universities, Research Centers
Technical community	Organizations that manage core Internet infrastructure