Setting the Scene: Emerging trends in digital technologies and artificial intelligence for climate action

Workshop 7:Strengthening Public Institutions for Climate Action
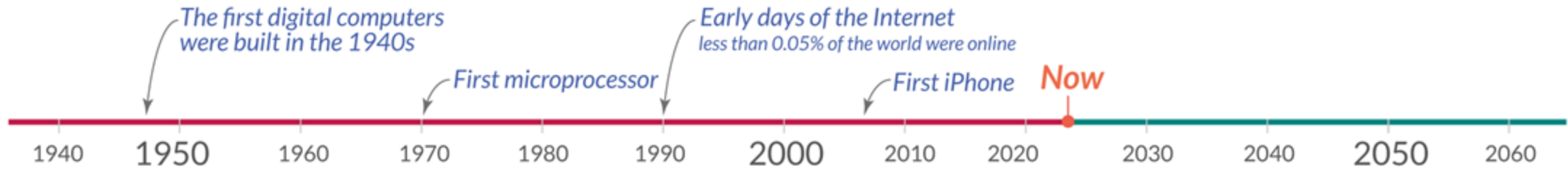
2024 UN Public Service Forum & Awards Ceremony

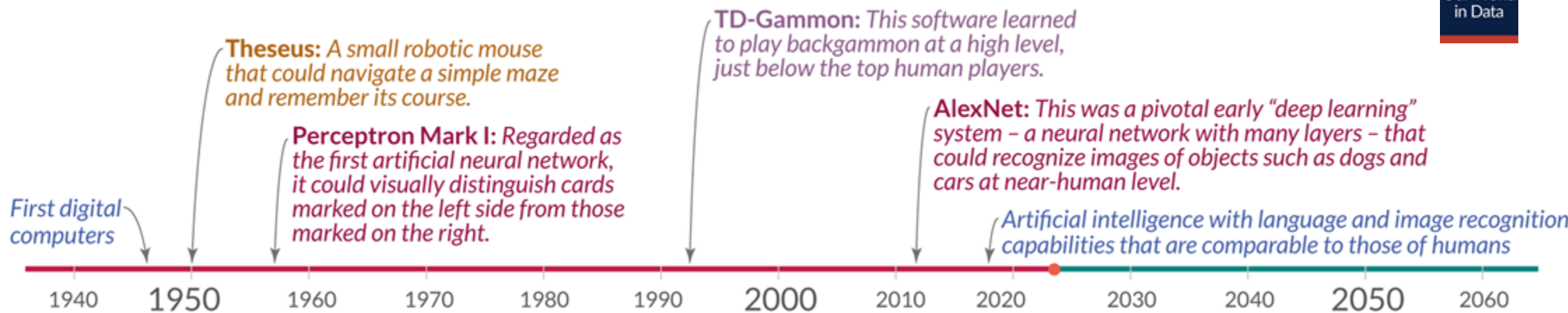**Ana Thorlund, United Nations Project Office on Governance (UNPOG)**

The digital transformation – A Cambrian data explosion

A timeline of AI milestones

Digital transformation, AI and climate change: complementary or confrontational?

**Comment**

https://doi.org/10.1038/s41558-023-01686-5

Halting generative AI advancements may slow down progress in climate research

Francesca Larosa, Sergio Hoyas, Javier García-Martínez, J. Alberto Conejero, Francesco Fuso Nerini & Ricardo Vinuesa

Check for updates

Large language models offer an opportunity to advance climate and sustainability research. We believe that a focus on regulation and validation of generative artificial intelligence models would provide more benefits to society than a halt in development.
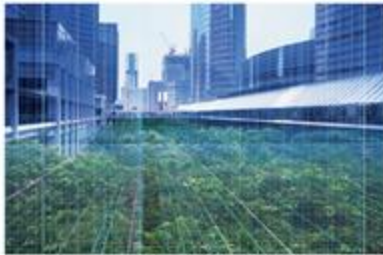
Opening the World Economic Forum in Davos this year, the United Nations (UN) Secretary-General António Guterres delivered a sobering message that "we are flirting with climate disaster", and that "every week brings a new climate horror story". The data justify these statements: in 2022, global losses due to natural disasters amounted to US$270 billion[1], and the costs to adapt to current and projected changes are already estimated to be around US$300 billion a year by 2030 (ref. 2). To limit global warming to 1.5–2 °C above pre-industrial

AI can operationalize, democratize and develop

electricity and trade

Energy intensive consumption of data centers

Semiconductor manufacturing industry is a major energy-intensive sector

DECEMBER 7, 2023 | 5 MIN READ

AI's Climate Impact Goes beyond Its Emissions

To understand how AI is contributing to climate change, look at the way it's being used

BY JUDE COLEMAN

Supporting Climate Action

Commit **Adminis**

- **Impro** of cli**m**

- **Impro** **mana**

- **Supporting carbon neutrality**

AI-powered near real-time analysis and future predictions of environmental and climate hazards

Facing the AI risks and challenges

Lack of quality data

Moral and ethical issues

Privacy and security

Lack of institutional capacity

Economic disparities

Job displacement

Lack of transparency

Misinformation and misuse

And going forward

Privacy regulations

Institutional and legal frameworks

Global Partnerships

R&D

Oversight and monitoring

What is the task at hand for public institutions?

- Asses existing capacity to use AI for enhancing efficiency, accessibility and effectiveness of services

- Update rules and safeguards to ensure that AI services are ethical, transparent, unbiased and accountable

- Assess climate action needs and prioritise

Group activity tomorrow:
Explore practical ways in which public institutions can leverage AI to enhance and improve climate action

Thank You

Email Address:.......@......