

## Global Symposium on Data and Digital Governance

19-20 October 2024, Shanghai.

21 October 2024, Deging

UN Geo Week: 22 October 2024, Deging



**DATE: 19th Oct 2024** 

## ARTIFICIAL INTELLIGENCE (AI) IN THE PUBLIC SECTOR: Applications, Institutional and Regulatory Frameworks



TIME: 2:00 PM - 5:00 PM

**SEMINAR 3** 





# INTERNATIONAL CONFERENCE ON DATA AND DIGITAL GOVERNANCE 2024

19 – 22 October 2024 Shanghai and Deqing

Dr. James Ong
Founder & MD, Artificial Intelligence International
Institute (AIII)
Adjunct Professor, Singapore University of Technology
and Design (SUTD) & AI Mega Centre
Singapore

**Expert Presentation:** 

Al for Humanity: Call for UN SDG #18 powered by Pubic-Pilanthropy-Private

Partnership Impact Model





#### **Our Advocacy**

## Sustainable AI for Humanity

Thought Leadership Ecosystem Engagement Advocacy Initiatives



Think



Engage



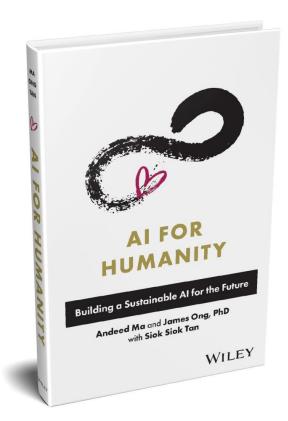
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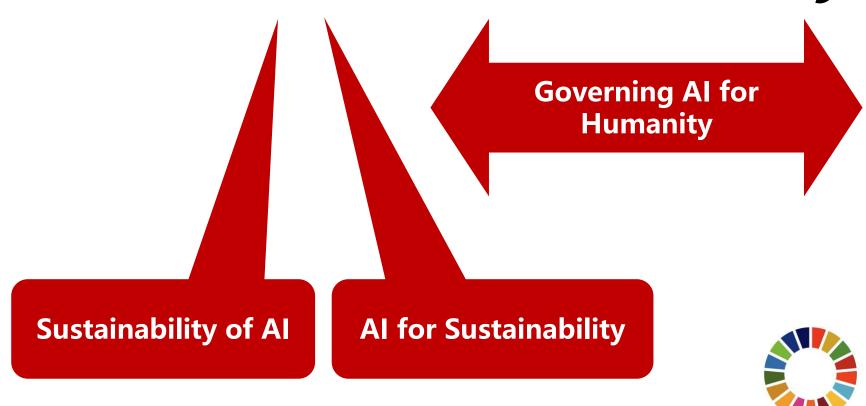








## Sustainable AI for Humanity









#### Globally, calling for ...



## Locally, calling for national and institutional level











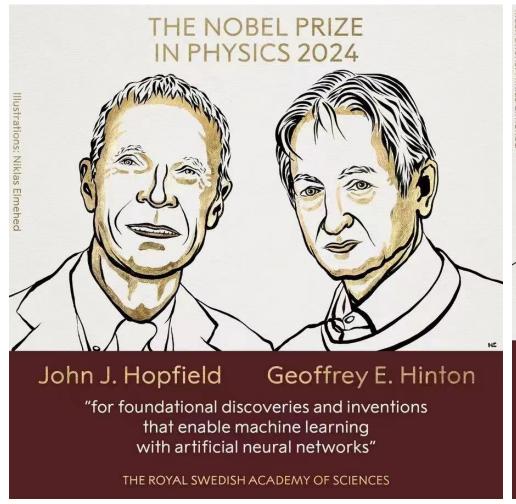


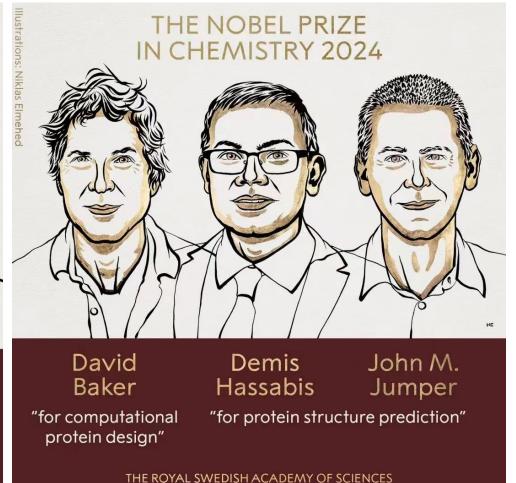








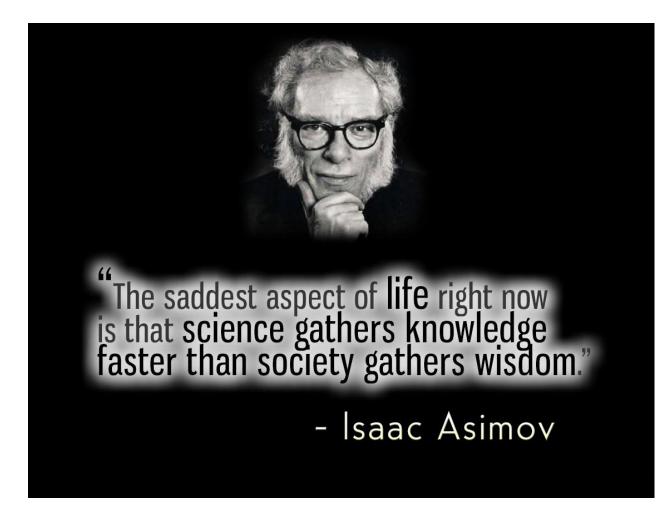








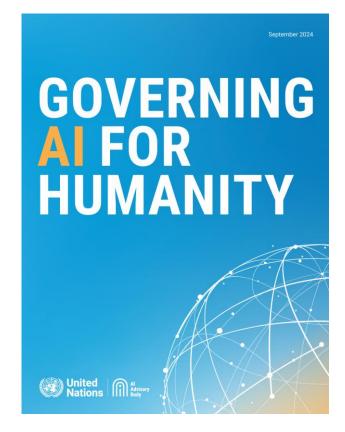












digital divides could limit the benefits of AI to a handful of States, companies and individuals.

Missed uses – failing to take advantage of and share AI-related benefits because of lack of trust or missing enablers such as capacity gaps and ineffective governance – could limit the opportunity envelope.

The imperative of global governance, in particular, is irrefutable. Al's raw materials, from critical minerals to training data, are globally sourced. General-purpose Al, deployed across borders, spawns manifold applications globally. The accelerating development of Al concentrates power and wealth on a global scale, with geopolitical and geoeconomic implications.

Fast, opaque and autonomous AI systems challenge traditional regulatory systems, while ever-more-powerful systems could upend the world of work. Autonomous weapons and public security uses of AI raise serious legal, security and humanitarian questions.

Left ungoverned, however, Al's opportunities may

not manifest or be distributed equitably. Widening

viii Moreover, no one currently understands all of Al's inner workings enough to fully control its outputs or predict its evolution. Nor are decision makers held accountable for developing, deploying or using systems they do not understand. Meanwhile, negative spillovers and downstream impacts resulting from such decisions are also likely to be global.











#### **Eric Schmidt's Al Talk at Stanford University**



#### His Biggest Concern

One important issue is how to detect dangers in an Al system ...

because the system may have learned some dangerous knowledge but ...

cannot tell you specifically what it is, and ...

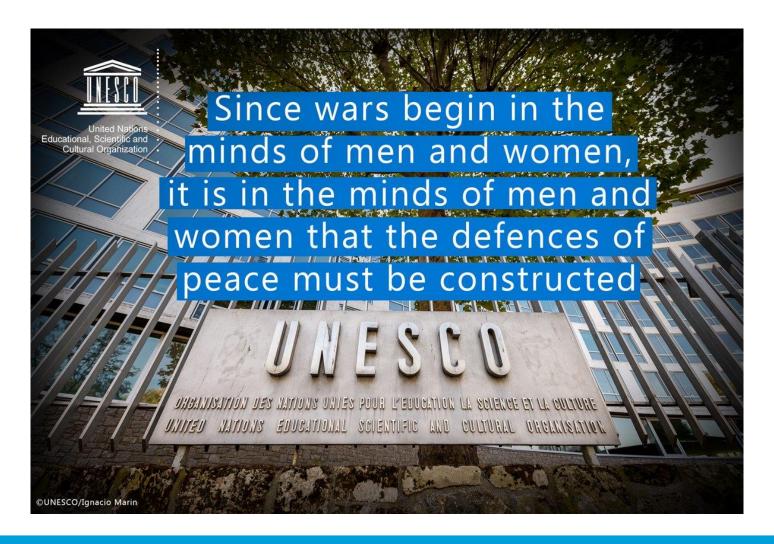
you don't know how to ask.



















## The Age of A.I. And Our Human Future Henry A. Kissinger Eric Schmidt Daniel Huttenlocher

Her

Henry Kissinger says he wants to call attention to the dangers of A.I. the same way he did for nuclear weapons but warns it's a 'totally new problem'

BY TRISTAN BOVE
May 9, 2023 at 4:38 AM GMT+8

#### **FORTUNE**



Former Secretary of State and National Security Advisor Henry Kissinger, pictured in 2018.











#### Education

## How Harmful Are Al's Biases on Diverse Student Populations?

Large language models exhibit alarming magnitudes of bias when generating stories about learners, often reinforcing harmful stereotypes

Oct 3, 2024 | Prabha Kannan

Law, Regulation, and Policy

The Tech Coup: A
New Book Shows
How the
Unchecked Power
of Companies Is
Destabilizing
Governance

In *The Tech Coup: How to Save Democracy from Silicon Valley*, Marietje Schaake, a Stanford HAI Policy Fellow, reveals how tech companies are encroaching on governmental roles, posing a threat to the democratic rule of law.

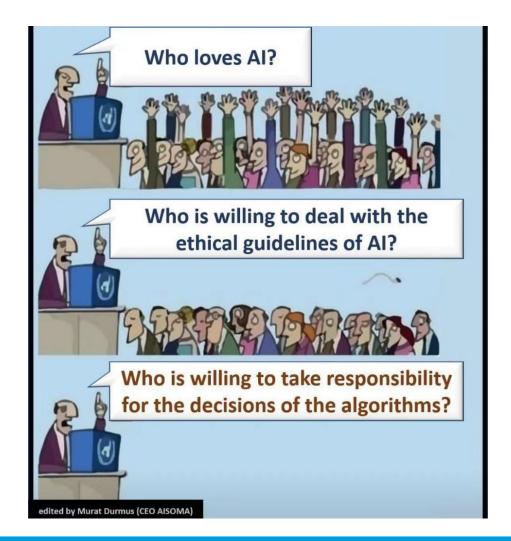
Oct 7, 2024 | Katharine Miller















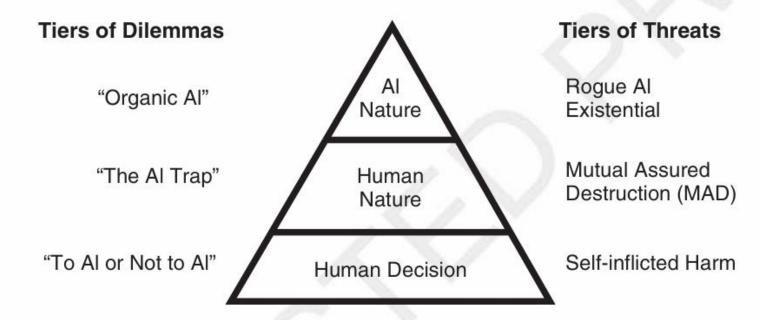




#### The Al Dilemma Hierarchy

Understanding the Nature of Al Dilemmas

#### The AI Dilemma



**Figure 4.1** The AI dilemma hierarchy.

















#### **Toward Sustainable AI for Humanity,**

Step 1

**Principles** 

Define Principles for Human-machine Relationship



Step 2

Model

Develop a Balanced Model



Step 3

Methodology

Devise an Effective Methodology









### **Rethinking AI**

#### Four Principles of A Humanity-First Philosophy

Humanity-First Philosophy

4 Principles of

Human-Machine Relationship

#### 1. Humanity-First Principle



#### 3. Symbiosis Principle



Figure 5.3 Humanity-First philosophy.

#### 2. Containment Principle



**Human Surrounding Machine** 

#### 4. Nurture Principle



**Human Parenting Machine** 







#### Sustainable AI for Humanity Model

Balancing Governance, Technology and Commercialization

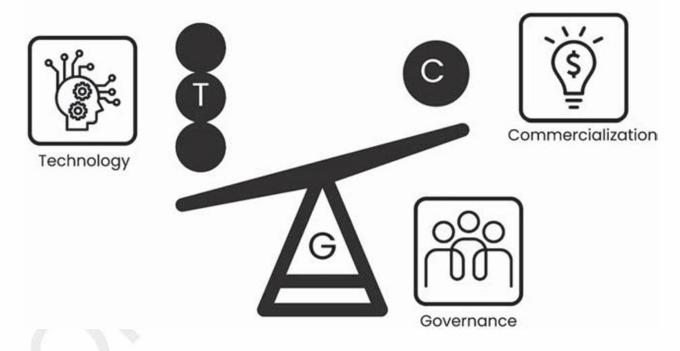


Figure 6.3 Balancing governance, technology, and commercialization.







#### A Paradigm Shift for Humanity

From AI as Usual to AI for Humanity

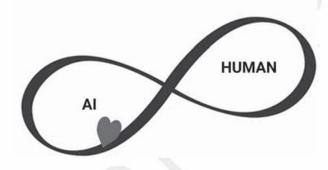


Figure 6.6 A paradigm shift for humanity.

3 Pillars	Al as Usual	Al for Humanity
Governance	Manage Like Any Other Technology	Nurture AI with Human Values and Risk Wisdom
Technology	Hyperfocus on Machine Intelligence and AGI	Pivot to Human-Al Symbiotic Intelligence
Commercialization	Pursue Profit-First Business Model	Champion Humanity-First Impact Model

Figure 6.2 Sustainable AI for Humanity Model: from "AI as usual" to "AI for Humanity."













#### **How AI Can Enable the Seventeen UN SDGs**

#### SUSTAINABLE GOALS



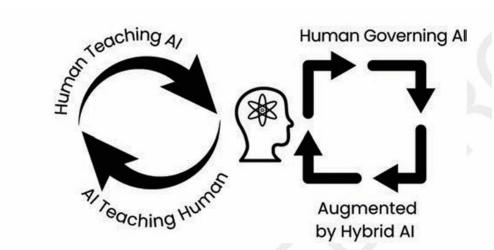


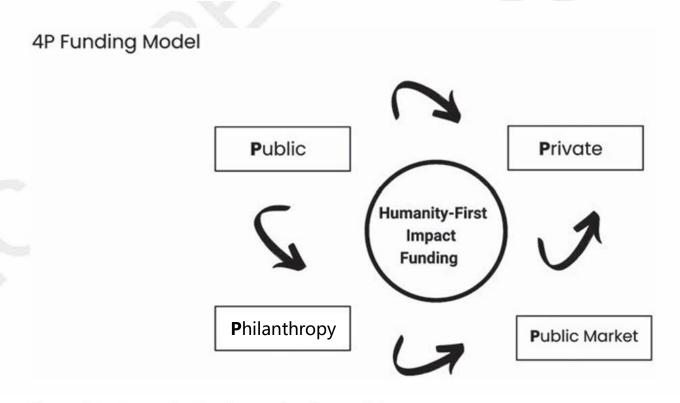
Figure 8.3 Shift to human—Al symbiotic intelligence.







#### Reimagine the Classic Business Model













## Consecutive Fourth Year of Global-Singapore-ASEAN-China Al Forum

Bilateral and Multilateral International AI Ecosystem Dialogue and Collaboration















WAIC2024

07.04 - 07.06 Shanghai · China 中国 · 上海 World Al Conference&High-Level Meeting on Global Al Governance

世界人工智能大会

暨人工智能全球治理高级别会议

## Governing Al for Good and for All

以共商促共享以善治促善智





#### **Building a Trusted AI Ecosystem for Singapore & the Region**

Artificial Intelligence International Institute

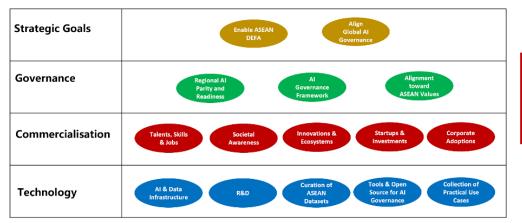
By Mrs Josephine Teo, Minister for Digital Development and Information



#### Why Sustainable AI is a Collective Responsibility

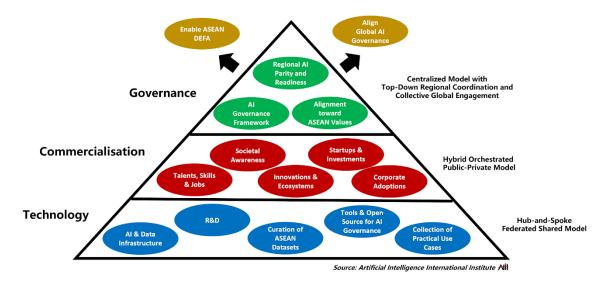
By James Ong

#### **ASEAN AI Aspirations**



Source: Artificial Intelligence International Institute All

#### A Collaborative 3-Tier Pyramid Model for Sustainable AI for ASEAN







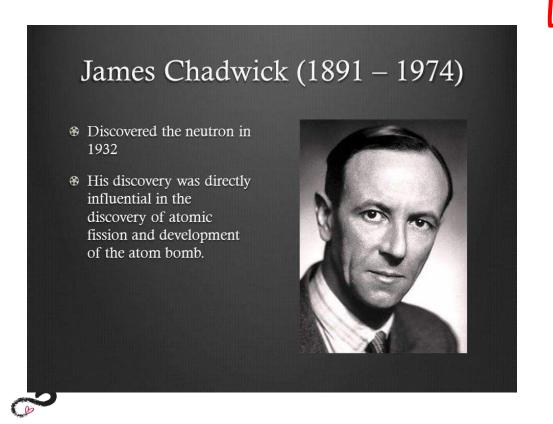








### What if we're right?



I remember the spring of 1941 to this day. I realized then that a nuclear bomb was not only possible — it was inevitable. Sooner or later these ideas could not be peculiar to us.

Everybody would think about them before long, and some country would put them into action. ...

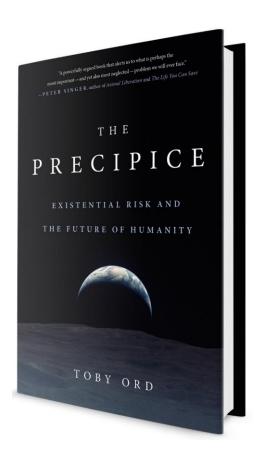
And there was nobody to talk to about it, I had many sleepless nights. But I did realize how very very serious it could be. And I had then to start taking sleeping pills. It was the only remedy, I've never stopped since then. It's 28 years, and I don't think I've missed a single night in all those 28 years.

JAMES CHADWICH

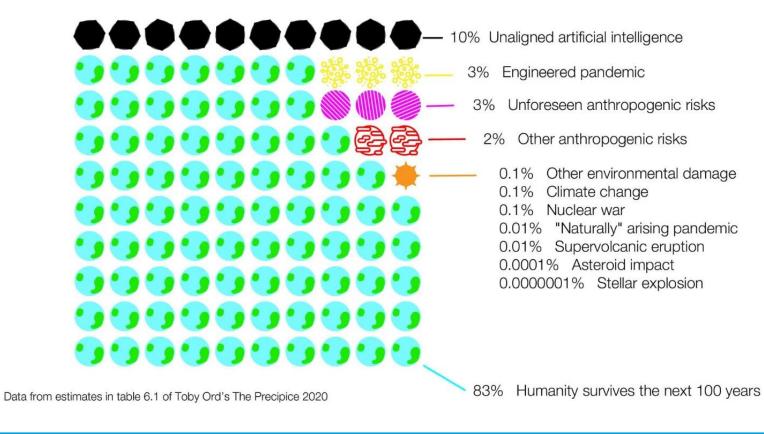
(Physics Nobel Laureate and author of the 1941 British government report on the inevitability of an atomic bomb, which finally spurred the Manhattan Project into action)







#### Estimate of existential risks in the next 100 years









## **Al Urgency**

#### 'The Godfather of A.I.' Leaves Google and Warns of Danger Ahead

For half a century, Geoffrey Hinton nurtured the technology at the heart of chatbots like ChatGPT. Now he worries it will cause serious harm.

Why It Matters

Geoffrey Hinton, a respected researcher who recently stepped down from Google, said it's time to confront the existential dangers of artificial intelligence.

L Share ↔











## **Al Urgency**





I think it's quite conceivable that humanity is just a passing phase in the evolution of intelligence.

**Geoffrey Hinton** | Former Vice President and Engineering Fellow, Google









# 'AI Godfather' Yoshua Bengio: We need a humanity defense organization

By Susan D'Agostino, October 17, 2023



Yoshua Bengio, founder and scientific director of Mila at the Quebec Al Institute, during a Senate Judiciary Subcommittee on Privacy, Technology and the Law hearing in July. The hearing was titled "Oversight of A.I.: Principles for Regulation." Photo credit: Valerie Plesch/Bloomberg via Getty Images



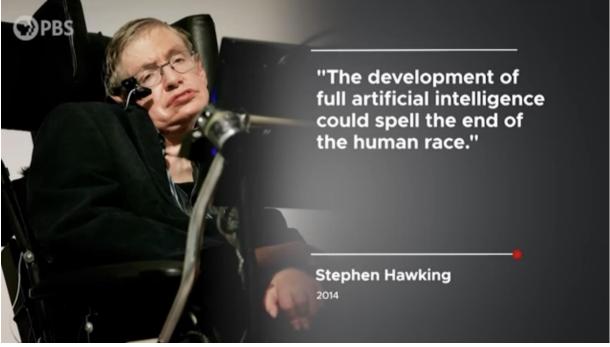






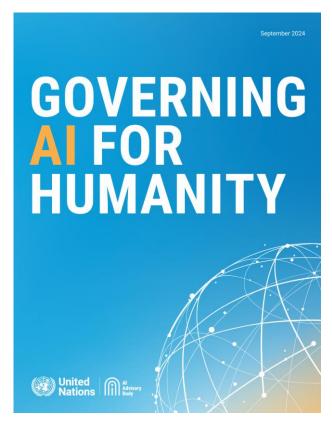
## **Al Urgency**













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#### Globally, calling for ...



## Locally, calling for national and institutional level

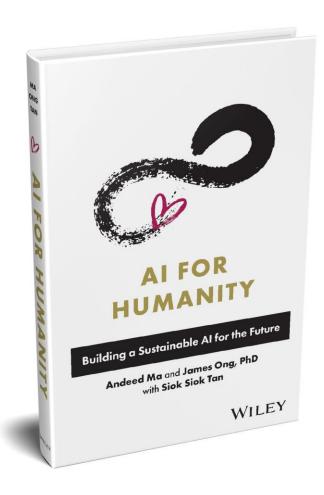












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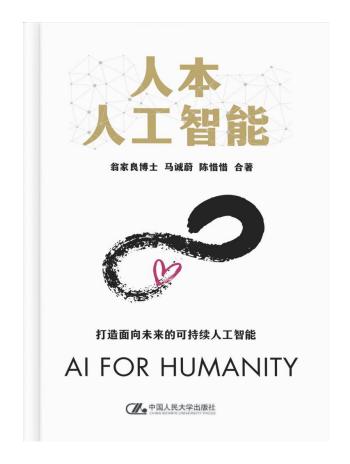


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