



# Public AI.

THE NEXT GENERATION OF  
PUBLIC INFRASTRUCTURE

THE PUBLIC AI NETWORK

AUGUST 2024

UPDATED OCTOBER 2024

**Preferred Citation:**

Public AI Network, “*Public AI: The Next Generation of Public Infrastructure*,” 10 August 2024, <https://publicai.network/whitepaper>  
DOI: 10.5281/zenodo.13914560

**Typeface:**

This document was typeset using Din, a font originally designed by the Prussian state railway system and now used as the standard typeface of the German highway system.

**Cover Image:**

[Library of Stuttgart](#), Gabriel Sollmann

**Version History:**

August 2024: Original release for Towards a More Public AI event at Library of Congress.

October 2024: Revision released with improved design and the title of the third feature changed from “Permanently Public” to “Permanent Public Goods.”



This work is licensed under a Creative Commons CC BY 4.0 Attribution License. To view this license, visit ([www.creativecommons.org/licenses/by/4.0/](http://www.creativecommons.org/licenses/by/4.0/)). For re-use or distribution, please include this copyright notice.

In this paper, we set out a vision for a different path for AI.

It starts with a recognition that societies don't have to just consume the AI technologies shaping their lives—they can create them.

That's why we call for a new collective enterprise: building AI infrastructure for the common good. Public investments can unleash a wave of innovation, expanding access to better tools, and in time expanding our collective imagination.

The result is a new political economy.

**This is Public AI.**

## CONTENTS

Introduction	2
What is Public AI?	6
Why We Need Public AI	9
The Essential Features of Public AI	16
Types of Public AI	26
Conclusion	32

# EXECUTIVE SUMMARY

Powerful AI systems are the culmination of millennia of collective effort. Their algorithms are derived from decades of public research. Their models are trained on mountains of interviews, articles, and books. Yet the concentration of AI development within a handful of unaccountable firms threatens to write the public out of our story.

That's why a new collective effort is needed. To ensure AI serves the common good we must build the next generation of public infrastructure: **Public AI**.

Building Public AI together offers a way to invest in a solid foundation for the next century of progress: ensuring that trustworthy AI systems protect our shared values, that flourishing marketplaces spark innovation on every problem, and that everyone has the tools they need to tackle the greatest problems facing society.

Here we identify the three essential features of Public AI that put the public in the driver's seat and accelerate us towards the common good:

## Public Access

- ↗ Certain capabilities are so important for participation in public life that access to them should be universal. Public AI provides affordable access to these tools so that everyone can realize their potential.

## Public Accountability

- ✓ Public AI earns trust by ensuring ultimate control of development rests with the public, giving everyone a chance to participate in shaping the future.

## Permanent Public Goods

- ⌚ Public AI is funded and operated in a way to maintain the public goods it produces permanently, enabling innovators to safely build atop its firm foundation.

We set out a roadmap calling for public investments into:

- Public goods at each layer of the AI stack to lower the costs of innovation
- Vertically-integrated public utilities to fund sustainable development
- Innovative new public goods that invent and scale breakthroughs to all

The time for action is now—and in labs, libraries, and legislatures around the world, the work to reignite our shared imagination by building Public AI has already begun.

# INTRODUCTION

Breakthroughs in artificial intelligence (AI) have the potential to transform society for the better. AI could accelerate learning and scientific discovery, enhance public services, and enable us all to achieve and understand more, with less effort—if we build it the right way. We propose that, like railways, electricity, and broadcasting before it, AI offers us a chance to reignite our shared imagination for the future by building powerful new infrastructures for the common good: PUBLIC AI.<sup>1</sup>

Our shared prosperity rests atop a foundation of reliable public<sup>2</sup> infrastructure that gives everyone access to the essential tools needed to thrive.<sup>3</sup> These “shared means to many ends” are the fruit of generations of shared effort. Forward-thinking infrastructure projects—from public transportation networks, energy grids, libraries, healthcare systems, broadcasters, telecommunications services, and beyond—have powered economic growth and steep increases in standards of living.<sup>4</sup> Yet their impacts haven’t stopped there. They have quietly enabled new freedoms and given rise to new cultural identities. It is hard to imagine America without its highways or the UK without the BBC.<sup>5</sup>

Yet on our current trajectory, the next generation of infrastructure—AI and the systems that power it—will not work for the public.<sup>6</sup> Instead its development is under the control of a few publicly unaccountable Big Tech firms. This concentration

- 1 There are growing calls for public AI infrastructure investments. To our knowledge the phrase ‘Public AI’ was coined by Schneier and Sanders, [‘Build AI by the People, for the People’](#); The definition was publicly workshopped in conversations hosted by the [‘Public AI Network’](#); The term has since started being used more widely, for example by the Serpentine, see Ivanova et al., [‘Future Art Ecosystems 4: Art x Public AI’](#) and in a forthcoming report by the Mozilla Foundation.
- 2 We use ‘Public’ to unite a coalition around a shared objective: the advancement of the common good, as in Eaves, Mazzucato, and Vasconcellos, [‘Digital Public Infrastructure and Public Value’](#). States have a leading role to play in creating Public AI—through ‘public investment’ and an empowered ‘public sector’—yet we all must do our part, from public-spirited developers to the many publics who rarely participate in shaping technology; We hope in this way ‘public’ can be “vague but exciting,” as in [‘Tim Berners-Lee’s Proposal’](#).
- 3 We use ‘Infrastructure’ to refer to the broad range of shared resources that enable both economic and social wellbeing, as in Frischmann, *Infrastructure*; Bowker et al., ‘Toward Information Infrastructure Studies’.
- 4 This paradigm of the social benefits of technology following their widespread installation and deployment can be seen in a range of economic history texts such as Gordon, *The Rise and Fall of American Growth*; Perez, *Technological Revolutions and Financial Capital*; Acemoglu and Johnson, *Power and Progress*.
- 5 Sitaraman and Alstott, *The Public Option*; Sawhney and Ekbia, *Universal Access and Its Asymmetries*; Briggs, *The BBC*,
- 6 UK Competition and Markets Authority, [‘AI Foundation Models: Initial Report’](#); Gerstein and Leidy, [‘Emerging Technology and Risk Analysis’](#).

of power is accelerating due to structural factors in AI development, including the high costs of computing, data, compliance, and specialized talent, as well as the compounding benefits of user feedback for tuning AI systems.<sup>7</sup> In these early days, firms are offering affordable services and evangelizing the public benefits of their wares. However, these claims must be treated with skepticism.

We cannot afford to be locked-in to unaccountable private infrastructure, again. As numerous examples from the last few decades of private digital platform development such as social media, Internet browsing and search, and mobile app stores show, natural monopolies are highly vulnerable to market failures. They often attract customers and lock them in, leaving consumers with little choice as platforms raise prices and cut corners on quality.<sup>8</sup>

The risks of an economy built atop this kind of private AI infrastructure are enormous. AI is likely to become a part of nearly every transaction and workplace. The incentive to secure such pivotal positions in the next generation of the economy is so strong that firms are already sprinting ahead rather than addressing societal risks such as the proliferation of misinformation, biased automated decision processes, and potential technological unemployment.<sup>9</sup>

Setting guardrails for such a fast-moving space is extremely difficult.<sup>10</sup> As one report put it, “How do you regulate an ever-changing landscape? It’s like trying to draw lines in a sand storm.”<sup>11</sup> Even if regulations are adopted, technology companies often simply withdraw from regulated markets rather than compromising their ambitions.<sup>12</sup> Thus while regulation might give societies a chance to press on the brakes, it doesn’t give citizens the ability to steer—much less accelerate—towards their desired futures. The result is widespread apprehension as we race into uncharted territory and a critical blockage in our collective imagination.<sup>13</sup>

7 Narechania and Sitaraman, '[An Antimonopoly Approach to Governing Artificial Intelligence](#)'.

8 Wu, *The Master Switch*; Rahman, '[The New Utilities](#)'; Crawford, *Atlas of AI*.

9 Kak and West, '[AI Now 2023 Landscape: Confronting Tech Power](#)'.

10 For an overview of regulatory efforts, see Brennan Center for Justice, '[Artificial Intelligence Legislation Tracker](#)'.

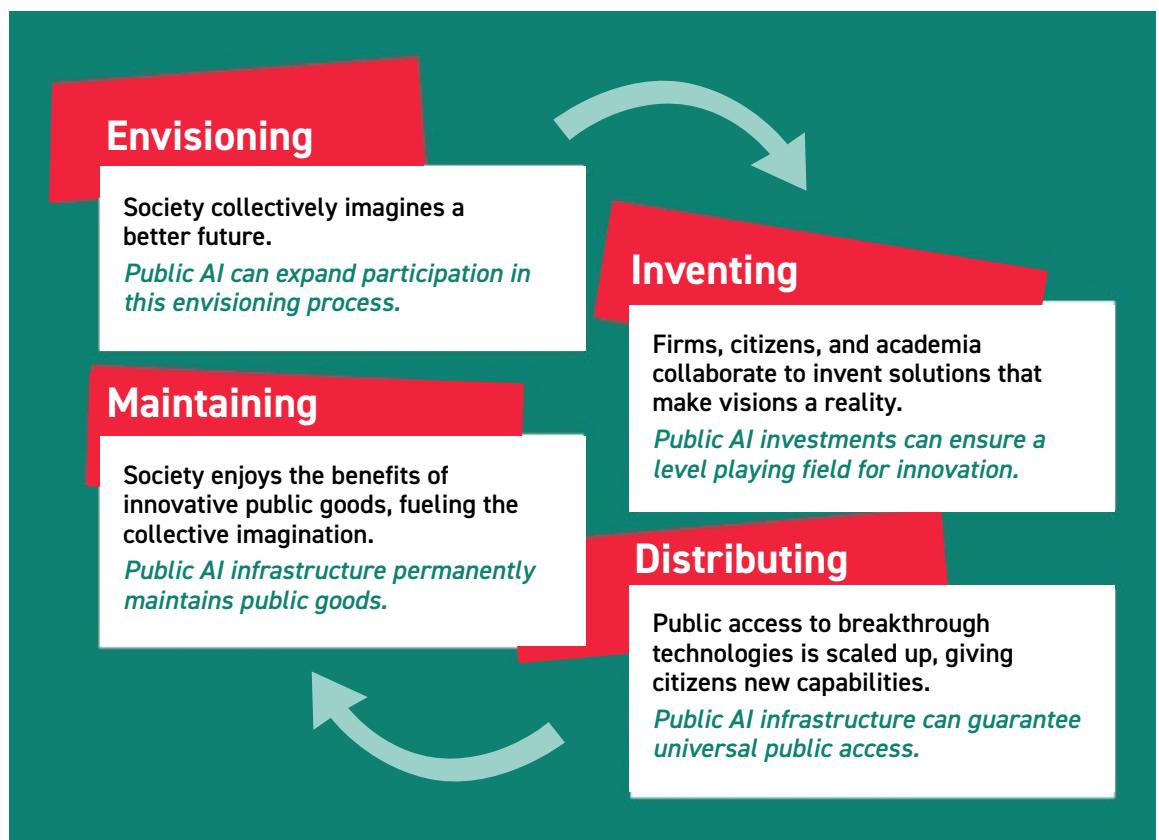
11 Khan, '[From Code to Consumer](#)'.

12 Weatherbed, '[Meta Won't Release Its Multimodal Llama AI Model in the EU](#)'.

13 UK Centre for Data Ethics and Innovation, '[Public Attitudes to Data and AI](#)'.

In this paper, we set out a vision for how things can take a different path.

It starts with a recognition that everyone has the ability to be a visionary, inventor, and problem solver—if they have access to the right tools. That's why the time is right to focus our collective effort on building Public AI infrastructures that provide us all with shared means to improve our lives. Building Public AI together can kickstart a virtuous cycle: where public investments expand access to better tools, which in turn expand our collective imagination. The result is a new political economy that empowers *people*—not just tech companies—to shape the development of AI (Figure 1).



**Figure 1: Scaling Public Goods with Public AI.**

This figure captures the moving parts of a political economic cycle that offers a chance to increase public access to the benefits of AI while making the entire development process more publicly accountable.

We have built great infrastructures before—and we can do it again. This vision shows the way.

- In Section 2, “What is Public AI?”, we identify the key features of Public AI that advance the common good: public access, public accountability, and permanent public goods. These work together to create a public-centric approach that turns AI into a collective effort where we all have a role to play.
- The case for public investment into this collective effort is strong. We make it in Section 3, “Why We Need Public AI,” showing how Public AI can solve some of the biggest challenges facing society with specific examples.
- Developing trustworthy infrastructure demands an approach that can earn the public's trust. In Section 4, “The Essential Features of Public AI,” we dive deep on the key aspects of this approach, to focus innovation on the challenges ahead.
- The Public AI approach can be used to build many types of infrastructure. We explore these opportunities in Section 5, “Types of Public AI.”

While there is no singular path to building Public AI infrastructure, we believe that it is the goal which, in the words of President John F. Kennedy, “will serve to organize and measure the best of our energies and skills.”<sup>14</sup>

In labs, libraries, and legislatures worldwide, the work has already begun.<sup>15</sup> Together, we can build an AI future that works for all of us.

---

<sup>14</sup> Kennedy, '[Address at Rice University on the Nation's Space Effort](#)'.

<sup>15</sup> '[Public AI Network](#)'.

# WHAT IS PUBLIC AI?

Public AI systems make the advancement of the common good their central goal. They might be as varied as the publics they serve: taking the form of reliable public utilities that make intelligence as ubiquitous as electricity or of public datasets that collect the vastness of human knowledge like the world's greatest libraries. They might lead to currently unimagined solutions to grand challenges such as improved universal access to high-quality healthcare or education. Ambitious projects are already well underway from Chicago to Switzerland to Singapore (Appendix 1).

Public AI has three key features which together ensure it advances the common good (Table 1).

	<b>Public Access</b>	<ul style="list-style-type: none"><li>✓ Expands access to essential capabilities</li><li>✓ Levels the playing field</li><li>✓ Universally available for free or at-cost</li></ul>
	<b>Public Accountability</b>	<ul style="list-style-type: none"><li>✓ Prioritizes public benefit</li><li>✓ Aligned with public goals and values</li><li>✓ Public has ultimate control</li></ul>
	<b>Permanent Public Goods</b>	<ul style="list-style-type: none"><li>✓ Sustainably funded and maintained</li><li>✓ Rewards shared effort</li><li>✓ Prevents private enclosure</li></ul>

Table 1: Essential features of Public AI

We propose this definition to capture a minimum viable set of requirements that can guarantee AI infrastructure serves the public interest. There is certainly no shortage of terminology in AI policy. But while terms like “responsible AI,” “open source AI,” or “democratic AI” describe worthwhile ambitions, they under-specify critical aspects of the development process which determine whether a technology serves the interests of the many or the few.<sup>16</sup> This leaves them vulnerable to buckling under the weight

<sup>16</sup> Collective Intelligence Project, '[A Roadmap to Democratic AI - 2024](#)'; OECD, '[Recommendation of the Council on Artificial Intelligence](#)'; OSI, '[The Open Source AI Definition – Draft v. 0.0.9](#)'.

	Public Access	Public Accountability	Permanent Public Goods
Public AI	✓	✓	✓
Private AI	⚠	✗	✗
Open source AI without governance	✓	✗	⚠
Utility-style regulation of private AI	✓	⚠	✗
Internal government AI	✗	✓	⚠
Government contracting public services out to private AI companies	✓	⚠	⚠

✓ Guaranteed
⚠ Not guaranteed
✗ Not an option

Table 2: Public aspects of different approaches to infrastructure governance

of concentrated market power. There is already a worrying trend that these terms, invented to serve the public interest, are being captured or co-opted by profit-driven corporations.<sup>17</sup>

Public AI's definition provides clear guardrails that focus efforts firmly on the public:

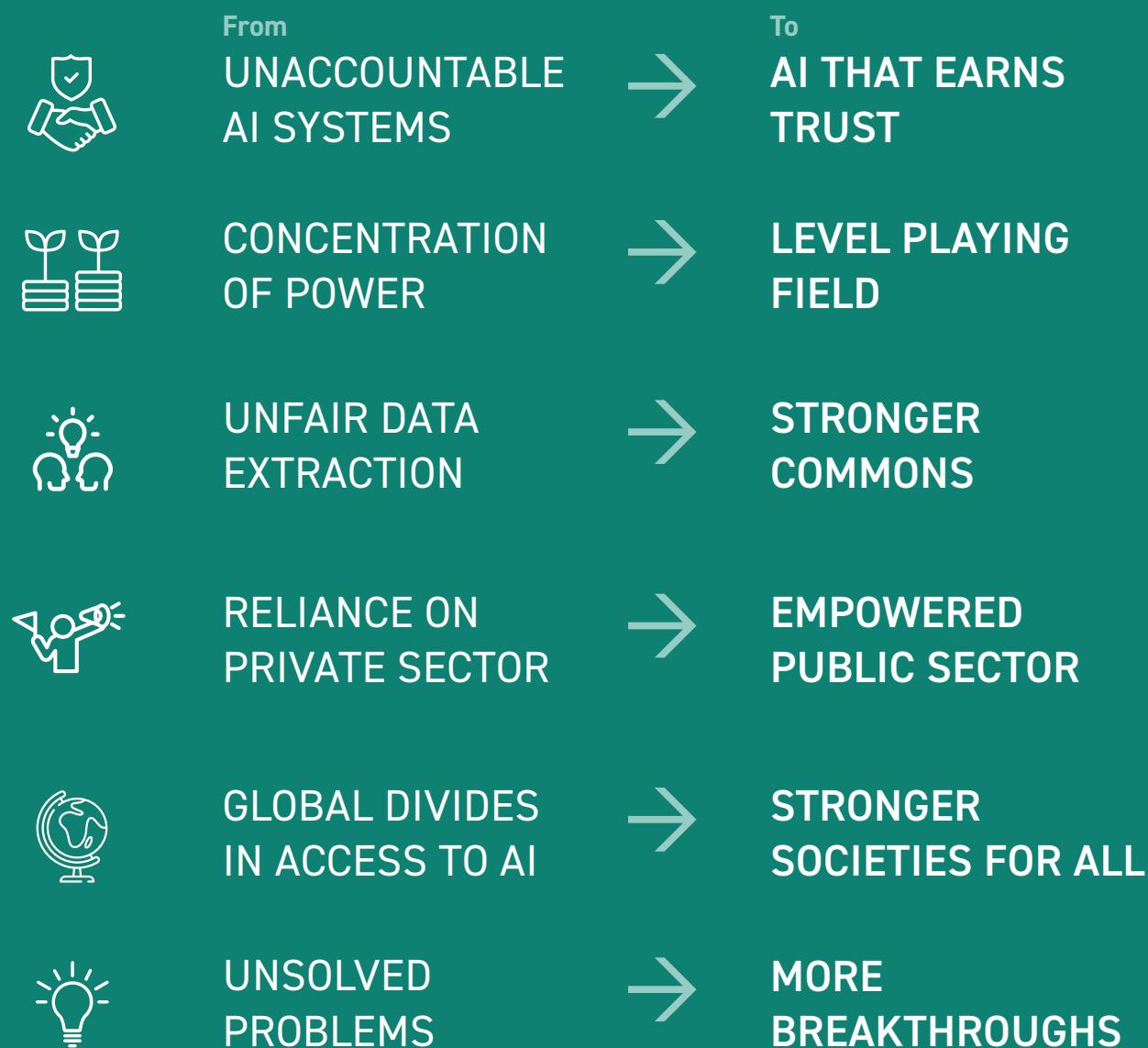
- Certain capabilities are so important for participation in public life that access to them should be universal. That's why **Public Access** is a key feature—providing everyone with direct, affordable access to these tools so that everyone can realize their potential.

<sup>17</sup> For an analysis of the myriad ways 'democratic' is used by AI developers, see Seger et al., '[Democratising AI: Multiple Meanings, Goals, and Methods](#)'; For an exploration of how 'openness' is helping concentrate power, see Keller and Tarkowski, '[The Paradox of Open](#)'.

- There are few technologists who oppose the idea of advancing the common good. But very few firms proactively seek public participation in the development process or change course when the public disapproves of their decisions. That's why ***Public Accountability*** is a key feature—giving the public the power to truly shape the development of technology. Public AI systems create trust by actively including the public from planning to maintenance - and having mechanisms that guarantee that the public have ultimate control over the systems built to serve them.
- All too often developers who want to do good with technology are unable to secure the funding needed to create lasting value. Accepting private capital and investment, on the other hand, locks them into problematic long-term incentives which lead to instability and distract from true innovation on the challenges facing society. To truly realize the opportunity of AI we need sustainable development models that enable us to chart a different course. That's why ***Permanent Public Goods*** are a key feature—creating sustainable foundations that everyone can rely upon.

Taken collectively, Public AI's three features articulate a path quite different from other public-interest governance strategies such as those described in Table 2, enabling it to tackle some of the greatest challenges facing society.

# WHY WE NEED PUBLIC AI



# WE NEED AI THAT CAN EARN THE PUBLIC'S TRUST—AND KEEP IT.

People today do not believe that AI works for them.<sup>18</sup> AI *could* enable abundance, by freeing up human efforts to tackle more critical problems through automation. AI *could* empower us with knowledge, by helping all people to organize and comprehend vast quantities of information. AI *could* help us do a lot of things, but only if it earns the public's trust and keeps it. The public understands that AI presents significant risks to their way of life, if not managed responsibly.<sup>19</sup> They have looked onwards with resignation as companies claiming to benefit all of humanity have instead consolidated control, breezed past calls for responsible development, and started to sprint towards increasingly advanced AI, without public support.<sup>20</sup>

Public AI—founded on the principles of public access and accountability—offers a way to put citizens back in the loop. We can replace the ‘black box’ technologies that currently terrify the public with trustworthy tools they better understand and chart a different course focused on the problems that matter most, not profit.<sup>21</sup> This approach can earn the trust of the public, encourage adoption, and accelerate the public benefits of AI. Once Public AI systems have blazed a path, then everyone will be able to share in the benefits.

## Public AI Example

### *Setting Norms for Responsible Development*

As private AI firms race to rapidly one-up each other while cutting corners, Public AI builders can instead develop best practices and high standards for safe and responsible design in response to their public responsibilities. These standards and practices can then be adopted, or mandated, throughout the ecosystem, enhancing trust and leading to faster adoption overall.

<sup>18</sup> See for example '[Study Finds Consumers Are Actively Turned Off by Products That Use AI](#)'.

<sup>19</sup> Jung and Desikan, '[Transformed by AI: How Generative Artificial Intelligence Could Affect Work in the UK – and How to Manage It](#)'.

<sup>20</sup> Tyson and Kikuchi, '[Growing Public Concern about the Role of Artificial Intelligence in Daily Life](#)'; Smith, '[Britons Lack Confidence That AI Can Be Developed and Regulated Responsibly](#)'.

<sup>21</sup> Surman et al., '[Accelerating Progress Toward Trustworthy AI](#)'; Seger and Axente, '[AI - Trustworthy By Design](#)'.

# WE NEED A LEVEL PLAYING FIELD THAT BENEFITS EVERYONE, EVERYWHERE.

Today, the AI sector is highly concentrated in just a few firms in just a few cities. This is exacerbated by significant barriers to entry such as extremely expensive computing power and high-quality datasets.<sup>22</sup> These costs are already stifling innovation, with even the world's top universities and research institutions being relegated to second-tier players.<sup>23</sup> Large firms are working to exploit this market position to ensure growth happens on their terms.

Investments into Public AI infrastructure can level the playing field and lead to a flourishing marketplace. Creating reliable public options for AI can guarantee the big players play fairly by guaranteeing consumers will always have a low-cost, high-quality provider to choose from. Investments into public computing and data infrastructure can eliminate barriers to entry, equipping entrepreneurs, small businesses, and community organizations with the capabilities they need to start innovating on every problem, in every place.<sup>24</sup>

## Public AI Example

### *Supercharging Small Businesses*

Investing in public compute clusters and high-quality datasets can reduce the barrier to entry by millions of dollars so that small startups can innovate. Investing in data portability and model switching standards will make it easier for consumers to switch to better products.

<sup>22</sup> Rikap, '[Dynamics of Corporate Governance Beyond Ownership in AI](#)'.

<sup>23</sup> Besiroglu et al., '[The Compute Divide in Machine Learning](#)'.

<sup>24</sup> For an excellent framework for the outcomes that will drive competition, see UK Competition and Markets Authority, '[AI Foundation Models: Initial Report](#)'.

# WE NEED RESPONSIBLE STEWARDSHIP OF OUR CULTURAL AND KNOWLEDGE COMMONS.

Through countless generations of effort, humanity has produced a vast wealth of knowledge, art, and information. Society has benefited as a culture of openness has made knowledge increasingly accessible through libraries, cultural institutions, and the Internet. Yet as unaccountable big AI firms scrape the world's data to secure their dominance, our shared commons is at risk of collapsing. Content creators worldwide—many of whom have never previously sought compensation for use of their work—have been hurrying to erect barriers to access and seek unprecedented expansions of intellectual property rights. Undaunted, big AI firms are negotiating exclusive rights to proprietary datasets with publishers, often cutting the actual creators out of the loop entirely.<sup>25</sup> This breakdown threatens to collapse our shared commons, halt socially beneficial AI development, or both.<sup>26</sup>

Building public AI could take us down a brighter path. Truly public datasets could replace corporate extraction with sustainable models that honor our shared contributions. Public compute and models could enable individuals to personalize and fine-tune models on their own data. Building public AI would restore the link between openness and progress by once again making the organization of knowledge a collective enterprise, done for the good of all.

## Public AI Example

### *Strengthening Local Cultures*

Public AI systems can be designed to reflect the needs of local users. Motivated by the prospect of helping their community, citizens could come together to create new local datasets that capture local knowledge, culture, and language that vastly outperform corporate models trained on the Internet.

<sup>25</sup> Angell, '[Making AI Work for Creators and the Commons](#)'; Tumadóttir, '[Questions for Consideration on AI & the Commons](#)'.

<sup>26</sup> Longpre et al., '[Consent in Crisis: The Rapid Decline of the AI Data Commons](#)'.

# WE NEED TO EMPOWER THE PUBLIC SECTOR TO LEAD THE WAY.

For decades, states have systematically hollowed out the public sector's technical capacity. Public investments into technology are all too often limited to funding foundational research. Resulting breakthroughs are typically brought to market by private firms who force the public to pay to access them, without a share of the dividends.<sup>27</sup> Public servants interested in actually *applying* technology have too often been relegated to the role of overseeing the massive flow of spending out of the public sector and into wasteful private contracting firms. Regulators, too, struggle to keep up with dominant firms which enjoy significant knowledge, data, and temporal asymmetries over their public sector counterparts.<sup>28</sup> Perversely, the dearth of public technology projects means that technologists who *do* have critical technical expertise are left unable to find good jobs that advance the public interest.

Investments into Public AI infrastructure projects offers a chance to invest in public sector capacity. It isn't just a way to reduce wasteful procurement spending. Public AI would create new meaningful jobs: training a new generation of technologists in the art of solving problems in the public interest instead of just maximizing profitability. These leaders could set the benchmarks for transparency, accountability, and ethical standards.<sup>29</sup> This could create a virtuous revolving door that shares expertise generated in Public AI institutions across society, to regulators, civil services, and private AI firms, leading to a more trustworthy AI ecosystem.

## Public AI Example

### *Creating Great Public Sector Jobs*

Governments worldwide seeking sovereign capabilities could turn wasteful procurement spending into sensible investment by funding Public AI systems instead of paying for licenses to private models. This would create great jobs and train a generation of public-interest leaders.

<sup>27</sup> ['New Study Shows NIH Investment in New Drug Approvals Is Comparable to Investment by Pharmaceutical Industry'.](#)

<sup>28</sup> O'Brien-Powers, '[Who Will Monitor the AI Monitors?](#)'

<sup>29</sup> See recommendation 6.3.2 in Goodman, '[AI Accountability Policy Report](#)', 73.

# WE NEED AI THAT STRENGTHENS SOCIETIES, WORLDWIDE.

AI has the potential to drive global progress towards sustainable development goals and address the digital governance gaps faced by countries who for decades have relied on technology over which they have little say.<sup>30</sup> The current trajectory of AI development threatens to reproduce many of the winner-takes-all tendencies of globalization that have denied global majority countries the capacity to build and steward the technology their citizens depend on. To ensure that their societies aren't left behind, many countries are beginning to invest in sovereign capabilities. These investments can be about more than protecting countries from foreign dependencies and security threats.<sup>31</sup> They offer a great opportunity to strengthen societies by empowering the public to shape their AI-enabled future: creating local jobs and protecting local languages, values, and cultures. Yet for every country able to make such investments, there are many more who aren't.

That's why builders of Public AI can make a difference by standardizing Public AI infrastructure from day one, ensuring the benefits of AI technology can scale globally.<sup>32</sup> It opens the possibilities for new forms of multilateral cooperation, bringing the ethos of shared scientific projects like CERN into the 21st century.<sup>33</sup>

## Public AI Example

### *Protecting Every Language*

Public AI institutions can build inclusive, free LLMs for under-represented languages, expanding public access to AI, and enriching local cultures—as is already happening with the SEA-LION project in Singapore (Appendix 1).

<sup>30</sup> Vinuesa et al., '[The Role of Artificial Intelligence in Achieving the Sustainable Development Goals](#)'; Tomašev et al., '[AI for Social Good](#)'.

<sup>31</sup> Kak, '[AI Nationalism\(s\)](#)'.

<sup>32</sup> United Nations Development Programme, '[Digital Public Goods for the SDGs](#)'.

<sup>33</sup> Jones, '[A "CERN for AI"](#)'.

# WE NEED AI BREAKTHROUGHS ON THE MOST IMPORTANT PROBLEMS FACING SOCIETY.

AI has the potential to help us achieve breakthroughs on significant challenges facing humanity. However, it is not guaranteed that the market alone will lead to the invention of these solutions or their effective distribution. The most recent wave of technological investments has led to more breakthroughs in advertising and entertainment than in tackling problems like extreme poverty or the scarcity of housing. Public AI can address this misalignment with moonshot efforts aimed at solving the grand challenges facing society—ensuring that AI research is aligned with the public benefit.<sup>34</sup>

Public AI can tackle vital problems that are otherwise underserved by firms driven to achieve a return on investment. Public AI systems could support breakthroughs in healthcare,<sup>35</sup> clean energy,<sup>36</sup> and possibly even support us in overcoming major societal issues like democratic backsliding<sup>37</sup> or access to education.<sup>38</sup> Public AI could also deliver affordable public access to breakthrough technologies that the market would price highly due to high investment costs or large risk profiles. This might include breakthroughs in areas as diverse as housing, medicine, or legal advice.

By taking on challenges failed by the market, Public AI investments have the potential to scale access to meaningful new public goods worldwide.

## Public AI Example

### *Launching a “Doctor AI” moonshot*

Public AI investment could drive the invention and distribution of a medical AI system. This clear public-interest goal could coordinate otherwise hesitant medical providers to share datasets needed for training and expand access to care in underserved populations.

<sup>34</sup> Mazzucato, *Mission Economy: A Moonshot Guide to Changing Capitalism*; For an example of grand challenges, see '[Turing 2.0: Changing the World for the Better with Data Science and AI](#)'.

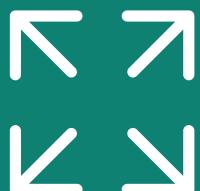
<sup>35</sup> '[Google DeepMind's AlphaFold 3 Could Transform Drug Discovery](#)'.

<sup>36</sup> '[Engineers Use AI to Wrangle Fusion Power for the Grid](#)'.

<sup>37</sup> Bruce Schneier, Henry Farrell, and Nathan E. Sanders, '[How Artificial Intelligence Can Aid Democracy](#)'

<sup>38</sup> World Economic Forum, '[Shaping the Future of Learning](#)'.

# THE ESSENTIAL FEATURES OF PUBLIC AI



## Public Access

- ✓ Expands access to essential capabilities
- ✓ Levels the playing field
- ✓ Universally available for free or at-cost



## Public Accountability

- ✓ Prioritizes public benefit
- ✓ Continuously aligned with public goals and values
- ✓ Public has ultimate control



## Permanent Public Goods

- ✓ Sustainably funded, provisioned and maintained
- ✓ Rewards shared effort
- ✓ Prevents private capture of public goods

# PUBLIC ACCESS

Public AI systems expand public access to the essential capabilities and benefits of AI to everyone, for free or at-cost. Truly expanding access to technological capabilities is not always as simple as making code open source. It requires removing any barriers that members of the public might face as they attempt to use a tool to solve their problem or realize a benefit. These barriers are rarely purely technological, and often reflect geographical, cultural, linguistic, and economic divides. Bridging these divides can require significant investment. However ensuring an essential system works for and is accessible to everyone has proven a worthy challenge that can unite societies.<sup>39</sup>

Public AI focuses on expanding access to capabilities that are essential: ones that are so important for participation in public life that access to them should be universal, for every member of the public.<sup>40</sup> These might take the form of increased access to knowledge and education, tools that support basic function in economic life, or capabilities needed to solve local problems. As the benefits of AI become clearer, the process of determining what capabilities are worth making universal via Public AI offers societies a chance to take charge of their future and to ensure that everyone can participate in this progress.<sup>41</sup>

<sup>39</sup> The US government's decision to charge a flat rate for delivery of letters across the continent in 1851 led to a flourishing of national culture, see Henkin, *The Postal Age*; The principle of being available to everyone for free at the point of use remains at the heart of the world's first universal health service, the NHS in England, see Delamothe, '[Founding Principles](#)'.

<sup>40</sup> Federal Communications Commission, '[Universal Service](#)'; American Library Association, '[Library Bill of Rights](#)'.

<sup>41</sup> Sitaraman and Alstott, *The Public Option*.

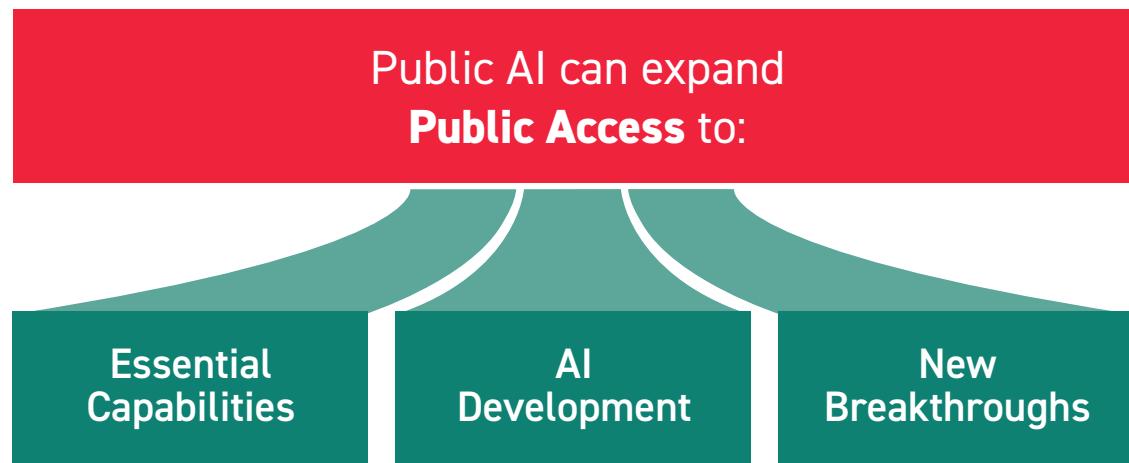


Figure 2

Technology	Long-Term Benefits
Postal system	Improved roads, land values, access to goods and information
Education	Increased earning power, increased quality of childhood
Electrification	Increased productivity, increased safety and quality of life after dark
Telephones	Increased social connectivity, reduced isolation, economic benefit from real-time communications
Libraries	Increased literacy, access to information, increased community space
Broadcasting	Increased access to professional entertainment and information, reduced isolation
Internet	Increased ability to share creative output, increased access to information

Table 3: Past Public Benefits from Public-Access Infrastructure

There are different types of capabilities that Public AI might scale access to:

- **Public Access to Essential Capabilities:** Public AI can introduce reliable and accessible public options for core technologies that markets are already delivering. This is especially valuable with services such as large AI models that are prone to natural monopoly formation. Without a public option, technologies built within natural monopolies are highly vulnerable to becoming inaccessible to the public. Since they serve as inputs for downstream economic activity, issues such as price fluctuations, degradations in service quality, and outages can cause cascading failures throughout society. Public options can stabilize economic activity by setting a dependable price and quality floor—enabling users to feel secure depending on these technologies and using them in ever more inventive ways. As can be seen in Table 3, scaling public access to even fairly simple technologies can create large amounts of unexpected public value downstream as they are integrated into daily life across society.<sup>42</sup>

<sup>42</sup> Table adapted from Sawhney and Ekbja, *Universal Access and Its Asymmetries*; and extended with analyses from Gordon, *The Rise and Fall of American Growth*.

- ***Public Access to AI Development:*** Public options can also eliminate scarcity for the key ingredients of AI development that are currently restricting economic participation. As shall be explored further in the section on Horizontal Platforms, this might entail expanding access to critical code libraries, training data, and compute resources. This levels the playing field so that everyone can contribute to creating value with AI, rather than the biggest players pricing smaller players out.
- ***Public Access to New Public Goods:*** On the other hand, as can be seen in Table 4, Public AI can unlock access to “moonshot” public benefits that are underserved by today’s markets, which are often driven by the pursuit of quarterly returns. Public AI investments might support longer-term goals like solving the housing crisis or more ambitious goals like building new services that would be priced as luxuries if delivered by private hands—such as medical or legal advice. Public AI investment can help achieve these goals in a variety of ways. It might found new NASA- or CERN-style agencies. Or the public sector can also set a broader mission, and marshal investment into sharing the building blocks of innovation, such as public compute and public datasets. When breakthroughs are realized it can invest in infrastructure to scale up access to them quickly.

Public Benefit	Potential Approach
Improved scientific discovery	Foundation models built on existing scientific data (e.g., those already in progress at Argonne National Labs)
Improved access to healthcare	Medical foundation models built on public health datasets
Improved access to justice	Legal foundation models built on court and legal datasets
Improved access to housing	New AI building technologies to reduce construction costs Planning technologies to streamline approvals process
Improved access to education	Free access to AI systems based on national curriculums
Improved access to nutrition	New agricultural technologies to increase efficiency

Table 4: Potential Moonshot Public Benefits of AI

# PUBLIC ACCOUNTABILITY

A revolution in public accountability is needed to rebuild trust in technological progress as a force for good.<sup>43</sup> Every key decision throughout the entire development process—from planning to execution and monitoring—should prioritize the public interest. Ultimate control over Public AI must rest with the public, which means developing mechanisms to ensure developers change direction based on public feedback and oversight in order to retain people's trust.

Builders of Public AI make the common good their primary objective—not profit maximization. This mission is far from limiting: it enables them to chart an independent course and solve problems in unique ways. This is the approach taken, for example, by one of the great public technology institutions: the BBC. Its public-interest charter has motivated generations to innovate in new ways to “entertain, inform, and educate.”<sup>44</sup>

Mission-led developers can lead the way in the realization of trustworthy AI.<sup>45</sup> Early attempts to make AI systems more trustworthy have largely focused on external auditing, regulation, and transparency.<sup>46</sup> While these approaches will be essential for holding private actors accountable, Public AI systems can go further, baking public participation and feedback into the development process itself. This addresses one of the core information asymmetries facing regulators, enabling the public's values and ethical standards to be considered up front, rather than only after negative side effects have occurred. But it also can meaningfully change the direction of development, giving citizens avenues to climb the “ladder of participation” going from simply being informed about how AI works in press releases to becoming true collaborators that can actively shape systems into ones that are empowering for them. There are promising experiments already underway to explore methods of public engagement in AI governance.<sup>47</sup>

---

<sup>43</sup> UK Centre for Data Ethics and Innovation, '[Public Attitudes to Data and AI](#)'.

<sup>44</sup> BBC, '[Mission, Values and Public Purposes](#)'.

<sup>45</sup> Seger and Axente, '[AI - Trustworthy By Design](#)'; Surman et al., '[Accelerating Progress Toward Trustworthy AI](#)'.

<sup>46</sup> Falco et al., '[Governing AI Safety through Independent Audits](#)'; Anderljung et al., '[Towards Publicly Accountable Frontier LLMs](#)'.

<sup>47</sup> Delgado et al., '[The Participatory Turn in AI Design](#)'; Ganguli et al., '[Collective Constitutional AI](#)'; Vincent et al., '[Data Leverage](#)'; Gilman, '[Democratizing AI](#)'.

***Corporations are AIs. They come with an objective function built in: to make money. And they are instrumentally rational to those ends... This is the moment for Public AI: before the business model of AI becomes clear. Massive funding is needed to experiment in lots of ways - not just ways that benefit corporate business models.***

Prof. Lawrence Lessig, Towards A More Public AI keynote,  
Library of Congress, August 2024

Clear public purpose and inclusive development practices enable Public AI to chart an independent course. Yet truly achieving public accountability requires balancing this autonomy with a need for binding and meaningful oversight.<sup>48</sup> As AI capabilities increase, there are difficult design decisions coming down the track for builders of AI systems, requiring developers to make complex tradeoffs. Builders of Public AI must take ownership of not just the code they write, but also for the consequences these decisions have on society as a whole.

Thus Public AI offers an opportunity to innovate not just in auditing technology, but also in how best to integrate governance mechanisms into the design of the organizations and institutions building AI. In countries with healthy democracies, this oversight could be managed by a public regulator or through development carried out within public institutions. There are promising efforts to identify new governance structures that formally empower more voices within organizations (such as data cooperatives or trusts) and within the communities they serve and impact (ranging from citizens assemblies to more institutionalized representative deliberative processes).<sup>49</sup> These institutional governance structures should also be supported by proactive compliance with broader legal regulations and norms, such as the right to contest automated decisions, opt out of AI services, and other rights proposed in frameworks like the White House's Blueprint for an AI Bill of Rights.<sup>50</sup>

<sup>48</sup> Sloane et al., '[Participation Is Not a Design Fix for Machine Learning](#)'.

<sup>49</sup> Ada Lovelace Institute, '[Exploring Legal Mechanisms for Data Stewardship](#)'; Ovadya, '[Reimagining Democracy for AI](#)'; AI & Democracy Foundation, Democracy Levels Working Group, '[Democracy Levels for AI](#)'.

<sup>50</sup> White House Office of Science and Technology Policy, '[Blueprint for an AI Bill of Rights](#)'.

Public accountability positions Public AI to create unique kinds of value for the public. There are many sensitive use cases where this public accountability is not merely a nice-to-have, but a hard requirement for public benefit. For this reason, governments worldwide are investigating options for sovereign AI capabilities that can manage sensitive data within a trusted environment. This imperative for accountability may expand to cover AI systems in some of the most important public-interest sectors, such as law, education, and healthcare, as the public expects systems to manage risk levels in transparent and ethical ways.<sup>51</sup>

Strong public accountability also means prioritizing issues and capabilities that the public deems valuable. There may be particular local challenges that a population wants to address, or there could be cultural priorities that are motivated by more than economics. Public AI providers might invest heavily in systems that strengthen local languages, civil rights, and fairness so that societies don't have to depend on the good will of private firms to protect society's most important values.<sup>52</sup>

On the other hand, this accountability might lead to features intentionally *not* being built due to their social harm.<sup>53</sup> For example, Public AI systems might include guardrails that limit the ability of AI to carry out certain tasks with a high risk of being used in disinformation campaigns, or might enforce robust data protection guidelines that prevent information from being shared with advertisers, or might invest heavily in technologies that favor expanding human capabilities and not in those that might replace them.<sup>54</sup> Thus, strong public accountability can encourage trust and optimism by eliminating the fear that technology will be misaligned with public values.

---

51 Ada Lovelace Institute, AI Now Institute and Open Government Partnership, '[Algorithmic Accountability for the Public Sector](#)'.

52 OpenAI, '[Preserving Languages for the Future](#)'.

53 Lazar and Nelson, '[AI Safety on Whose Terms?](#)'

54 Acemoglu and Restrepo, '[The Race between Man and Machine](#)'.

# PERMANENT PUBLIC GOODS

Public AI infrastructure must be designed to remain permanently accessible and accountable so that it can serve as a reliable foundation for the long term. This permanence enables the public to integrate it into their lives and invest energy into making it better.

The recent history of digital platforms provides a cautionary tale, demonstrating the importance of long-term sustainability, and how easy it is for a commons to be enclosed with each new generation of tools and interfaces. In previous decades, a number of VC-backed startups gained market share by superficially adopting the language of public access and accountability, without sustainable business models. They gave near-free access to so-called “public spaces,” and communities reciprocated by quickly adopting these platforms and investing billions of hours of effort in building what appeared to be a commons. However, as the need for return on investment begins to rear its head, things that were previously seen as public goods, such as Twitter and Reddit, are being enclosed and controlled for private benefit, undermining public trust and community investment.<sup>55</sup>

This pattern is set to repeat itself in dramatic fashion—as leading private AI firms start with a grand vision of AI for humanity and offer products for free while spending tens of billions to outcompete each other. History suggests what will happen when initial seed funding disappears and investors look for returns on investment. Private firms are likely to under-invest in public-interest outcomes and optimize for building local monopolies, capturing subsidies, and enclosing common goods in service layers. The risk of this model has also played out with physical infrastructure to dramatic effect in the UK. Privatized water firms have extracted private profits from the very funds that were meant to repair the country’s water infrastructure, leading to record levels of waste in UK rivers.<sup>56</sup> Should AI companies be forced into difficult commercial decisions, essential public-interest features like fact-checking and AI safety may be the first to go as firms tighten their belts, as was already done for AI ethics teams.<sup>57</sup>

<sup>55</sup> Doctorow, ‘[The “Enshittification” of TikTok](#)’.

<sup>56</sup> Newson, ‘[River Pollution and the Regulation of Private Water Companies](#)’.

<sup>57</sup> Vynck and Oremus, ‘[As AI Booms, Tech Firms Are Laying off Their Ethicists](#)’.

***The focus on ethics issues in AI is too narrow—we need to think about incentive alignment and business model feasibility. Public options can offer an alternative for customers.***

**Prof. Diane Coyle DBE,  
Public AI Seminar, January 2024**

To avoid this outcome, Public AI must find ways to be sustainably developed and independently maintained as a public good, guaranteeing public control in perpetuity. In the past, the solution was simple: public ownership. This might not be feasible everywhere however, meaning there may be room for further innovation. Sustainability is achievable in multiple ways, presenting opportunities for the development of innovative public-interest funding models and governance strategies that ensure public goods can provide permanent foundations.

First, the upfront costs to build the infrastructure must be covered in a way that maintains its long-term independence. This initial investment must not be used as grounds for subsequent capture by private interests, such as large firms using “open-washing” to tilt the playing field in their favor.<sup>58</sup> The initial cost of development and overall ownership of systems could be achieved through state investment with its unique capability to make large fixed capital investments rivaling those in the private sector. Yet there is room for further innovation. Groups such as the free software community can produce a rising tide that uplifts all approaches, by producing building blocks for infrastructure that can be freely reused and remixed, lowering the initial investment needed. The initial investments themselves might take the form of philanthropic funding or public-private partnerships, with mechanisms to ensure that this private funding does not prevent public accountability or enable public goods to be enclosed in the future. Innovative corporate structures might bind control over an organization to representative deliberative processes instead of shareholders, maintaining economic incentives to enable investment, but with decision-making power held by the public.<sup>59</sup>

<sup>58</sup> Keller and Tarkowski, ‘[The Paradox of Open](#)’; Widder, West, and Whittaker, ‘[Open \(For Business\)](#)’.

<sup>59</sup> Ovadya, ‘[Reimagining Democracy for AI](#)’.

The operating expenses of continuously running Public AI systems are another area for innovation. Right now, many private AI systems are giving access away for free and banking on being able to lock-customers in or cut corners down the road to achieve profitability. However, this page from the Big Tech playbook isn't available to many public interest players. The industry standard of releasing models as open source is already presenting issues to Public AI model builders, who in the absence of public compute must release their work as open source in order to make their work publicly accessible, but now find that it leaves them dependent on external funding—while hosting providers profit from their models.<sup>60</sup>

Public AI systems could experiment with new business models that capture the value they create, better price in externalities, and align incentives with the public interest. On the one hand, they might prioritize financial sustainability by charging transparent usage fees that cover costs with minimal overhead. On the other hand, Public AI pricing offers the public sector a wide range of levers to shift downstream market incentives. Public subsidies could lower prices, driving adoption and productivity. Or other innovations in pricing might shape downstream incentives, ranging from subsidizing usage for marginalized or disadvantaged groups, to charging different prices for different capability tiers. These opportunities for downstream value capture offer Public AI providers unique flexibility to pursue the common good in innovative ways.

---

<sup>60</sup> Sahlgren, '[Public AI Seminar: GPT-SW3](#)'.

# TYPES OF PUBLIC AI

Public AI projects are in progress all around the world. They take many forms, but here we group them into three categories. The first two, *horizontal* and *vertical platforms*, shape society by providing public options in existing marketplaces. The category, *new public goods*, fills gaps underserved by the market.

COMPUTE  
DATA  
MODELS  
FINE TUNING & APPLICATIONS  
GOVERNANCE

**HORIZONTAL PLATFORMS**  
infrastructural  
public options

**VERTICAL PLATFORMS**  
competitive full-stack  
public options

**NEW PUBLIC GOODS**  
solve problems  
ignored by market

**Private Compute**  
(AWS, Azure)

**Public Compute**  
(NAIRR, EmpireAI)

**Private Expert Datasets**  
(Scale AI, Most Not Disclosed)

**Public Expert Datasets**  
(None, Yet)

**Private Foundation Models**  
(ChatGPT, LLaMA, Claude)

**Public Foundation Models**  
(GPT-SW3, Falcon, SEA-LION)

**Private Marketplaces**  
(GPTs, Salesforce)

**Public Marketplaces**  
(None, Yet)

**Private Auditing Tools**  
(Details Not Disclosed)

**Public Auditing Service**  
(UK AI Safety Institute)

**Private AI Platforms**  
(Open AI, Anthropic)

**Public AI Utilities**  
(None, Yet)

**Public Medical Data**

**Public Cultural Data**

**Public Science Model**

**Public Legal Model**

**Public Doctor AI Service**  
(None, Yet)

# HORIZONTAL PLATFORMS CAN LOWER THE COSTS OF INNOVATION

Horizontal platforms offer public options for the building blocks critical to making an AI system. They are horizontal as there are distinct interventions for each layer of the AI stack. Public support in each horizontal layer of the stack strengthens competition by limiting the ability of large firms to consolidate power through vertical integration.<sup>61</sup>

Public investment can achieve these aims via a variety of means. To start, states can back clear standards that help separate complex systems into well-defined layers, as happened with TCP/IP, which defined the core architectural layers of the Internet. Public investment can also lower barriers to entry by producing and supporting public options in each of these horizontal layers, starting with the most expensive components that are barriers to entry and extending to mission-critical infrastructure where reliability is paramount. This is similar to how anti-monopoly policies and public ownership of train tracks and power plants function in other sectors.

These investments might focus on areas such as:

- **Public compute** initiatives that aim to protect and provide the significant computational capacity that researchers, academia, and small firms need to build competitive AI models. This addresses a growing “compute divide” that is preventing academics from continuing to participate in fundamental research.<sup>62</sup> Current examples of such initiatives include national efforts like Canada’s AI Compute Access program and the National AI Research Resource (NAIRR) in the US, as well as more local efforts like CalCompute and Empire AI, designed to support local economic development.<sup>63</sup>

---

<sup>61</sup> Investing in standards to create clear horizontal layers can be thought of as a form of structural separation, as explored in Ricks, Sitaraman, and Menand, *Networks, Platforms, and Utilities*; Narechania and Sitaraman, '[An Antimonopoly Approach to Governing Artificial Intelligence](#)', 42.

<sup>62</sup> Besiroglu et al., '[The Compute Divide in Machine Learning](#)'; Bahri et al., '[Explaining Neural Scaling Laws](#)'.

<sup>63</sup> US Department of Energy, '[DOE Advancing Safe and Secure AI Research Infrastructure Through the National Artificial Intelligence Research Resource Pilot](#)'; ISED Canada, '[Consultation on Artificial Intelligence \(AI\) Compute](#)'.

- ***Public data*** initiatives that provide researchers and developers with the datasets they need to build world-class models.<sup>64</sup> Big firms are investing heavily in proprietary, well-curated datasets to secure their advantage. These same big firms stand to gain further as data from user interactions can be used to power system improvements. In the short term, investments in public versions of these datasets could be built upon existing public data repositories to remove these barriers to entry.<sup>65</sup> In the long term, the creation and maintenance of public data infrastructure could be built to replace the current extractive relationship between AI builders and data providers with fairer models such as data trusts.<sup>66</sup> This new infrastructure will help ensure that models are built upon trustworthy information and that using these common resources leads to revenue that supports maintenance, rather than free-riding. If mechanisms for ensuring public accountability in downstream usage are developed, this could lead to a step change in the availability of data in key fields such as healthcare.<sup>67</sup>
- ***Public model*** initiatives that could help provide higher-trust and higher-reliability alternatives for developers or users who don't want their AI solutions to be dependent on components controlled by other private entities or open source. These models can be built to deliver similar features as marketplace options, but might also focus on local problems such as providing specific hyperlocal information or outstanding capability in local languages, such as Southeast Asian Languages In One Network (SEA-LION) built in Singapore.<sup>68</sup>
- ***Shared standards and infrastructure*** that can enable a renewed ecosystem of AI development. One of the most effective ways to drive innovation is for states and NGOs to “promote consensus industry standards” that act in the public interest to

---

<sup>64</sup> National Artificial Intelligence Research Resource Task Force, '[Strengthening and Democratizing the U.S. Artificial Intelligence Innovation Ecosystem](#)', 32, in particular on Data and Datasets: "The Operating Entity should support data resource providers by either funding the creation of or providing continuing support to existing AI data repositories."

<sup>65</sup> Chan, Bradley, and Rajkumar, '[Reclaiming the Digital Commons](#)'; While not yet focused on LLMs, the Data.gov kind of platform provides groundwork needed to share datasets for human preference alignment, task-specific fine-tuning, and even pre-training, see '[About Us](#)'.

<sup>66</sup> For a provocative exploration of how organizations can better steward their data see Ivanova et al., '[Future Art Ecosystems 4: Art x Public AI](#)'; Data Trusts Initiative, '[About](#)'; Tarkowski, Keller, and Vogelezang, '[Public Data Commons](#)'.

<sup>67</sup> Macon-Cooney et al., '[A New National Purpose](#)'.

<sup>68</sup> '[Swiss AI Initiative](#)'; '[SEA-LION - AI Singapore](#)'.

create well-structured layers of infrastructure.<sup>69</sup> Such influence should be combined with investment to ensure that the open source community isn't so dependent on monopolistic players, who often use that dependence to tilt the playing field in their favor.<sup>70</sup> The work already underway on standards for safety and trustworthiness should be accompanied by work on standards and infrastructure that increase customer choices and create healthy marketplaces characterized by access, diversity, choice, and transparency.<sup>71</sup> In the fast-moving market for AI, building standards and infrastructure to deliver these outcomes is likely to be more effective than regulating *after* market power has already been consolidated.

Public investment in these horizontal platforms provide reliable foundations that anyone can innovate on top of, strengthening both the public and private ecosystems.

---

<sup>69</sup> In the US, AI standards efforts have been initiated by The White House, [Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence](#); In the UK, see '[About the AI Standards Hub](#)'.

<sup>70</sup> Khan, '[From Code to Consumer](#)'.

<sup>71</sup> '[AI Foundation Models: Initial Report](#)'; Blagsvedt, '[AI Workflow Standards](#)'.

# VERTICAL PLATFORMS CREATE COMPETITIVE PUBLIC OPTIONS

Vertical platforms offer end-to-end consumer services that might span multiple layers of the AI stack, providing direct alternatives to dominant AI industry players while competing along other dimensions such as affordability, values alignment, and trustworthiness.<sup>72</sup>

The current big vertical platforms may offer low prices today in order to acquire more users, but the tech industry has shown that, once they acquire market share, vertical platforms use their extraordinary leverage to extract rents and shape the rules that everyone else plays by. For instance Apple has famously used its position as a vertical platform spanning hardware and software to lock consumers and businesses into their App Store, with 30% overhead.<sup>73</sup>

Thus, to realize Public AI's true potential for societal benefit, alternative vertical platforms in the form of public utilities will likely be needed. These utilities might focus on delivering reliable, high-quality, low-cost options to consumers, like the US Postal Service does. But with their emphasis on consumer experience, vertical platforms also offer the potential to blaze a new path that more meaningfully gives the public what they want. Vertical Public AI expands upon the potential offered by sovereign AI to integrate development activities and ensure cultural and economic alignment throughout the AI stack.<sup>74</sup> An example of the positive potential of a public-interest vertical platform from a past transformative technology is the BBC. The BBC has successfully provided end-to-end public broadcasting services for decades, becoming one of the most reliable and impactful sources of news worldwide.<sup>75</sup>

Starting a vertical platform may require large up-front investments equivalent to starting a traditional public utility. However, with strong public options in the horizontal layers and alignment with the open source community, these costs would be significantly lower. Furthermore, since these public options can compete on the open market, vertical platforms have the potential to generate revenue, ensuring their sustainability and continuous improvement.

---

72 Coyle, '[The Public Option](#)'.

73 Tilley, '[Apple Changes Its App Store Policy. Critics Call the Moves "Outrageous."](#)'

74 Belfield, '[Great British Cloud and BritGPT: The UK's AI Industrial Strategy Must Play to Our Strengths](#)'; AI Sweden, '[GPT-SW3](#)'.

75 Jackson, '[The UK Needs a "British AI Corporation", Modelled on the BBC](#)'.

# NEW PUBLIC GOODS SOLVE UNDERSERVED PUBLIC PROBLEMS

Whereas horizontal platforms and vertical platforms offer public options in existing markets, *new public goods* in AI are technologies specifically designed to address underserved problems of public importance that aren't well served by markets.<sup>76</sup> These gaps might exist due to a lack of incentive for private firms to invest, the inherent legal risks surrounding a problem, or a lack of coordination. The Public AI approach, on the other hand, coordinates investment into a product that can actually scale breakthroughs to the public, delivering impact at scale. By targeting investment at sources of scarcity impacting public wellbeing, investments in new public goods could deliver direct benefits that people actually want instead of just abstract productivity improvements that go to firms best positioned to capitalize on them. Examples for ambitious new public goods might include a public tutor AI to improve education in an accountable way, a medical doctor AI to increase free access to medical advice, a hyperlocal weather prediction AI, or a scientific AI like AuroraGPT.

Inventing new public goods provides a pathway to public infrastructure, as the components required to build specialized tools can then be opened up to creative public use. Large pieces of the architecture of the Internet, for example, emerged from more specialized public-interest projects. ARPANET, initially funded by the US government, introduced foundational technologies like data packet switching and network protocols. Similarly, CERN's development of hypertext to manage and share scientific data played a crucial role in the creation of the World Wide Web.<sup>77</sup> These examples demonstrate how focused public-interest projects can catalyze the development of expansive, versatile public infrastructure.

---

<sup>76</sup> This aligns with the standard for Digital Public Goods which require a focus on a Sustainable Development Goal, see Digital Public Goods Alliance, '[Digital Public Goods Standard](#)'.

<sup>77</sup> Abbate, *Inventing the Internet*; Berners-Lee, '[WWW](#)'.

# CONCLUSION

Ultimately, Public AI is an approach, a vision, an ethos. There are many paths forward because this approach can take a variety of forms, from state-of-the-art vertically integrated AI platforms and public services, to reusable horizontal infrastructures that enable competition and innovation, to targeted investments in important new public goods. Already, from Switzerland to Singapore, different Public AI experiments are shaping a new, competitive AI landscape where the public interest is prioritized. But there are many more opportunities to innovate and invest in lasting infrastructure at all levels of the AI stack, and we have to start now.

As interest in Public AI grows, private providers will adopt that language to describe their work, while trying to retain a gatekeeping role. This is why all of the features of Public AI are essential—access to ensure its benefits are widespread, accountability to ensure systems serve the public interest, and sustainable funding and governance to ensure it remains a public good, permanently.

In contrast, today's AI landscape is dominated by a few large players with unparalleled access to high-cost computational power, data, and talent. Today's AI landscape is characterized by deep public distrust and even active opposition to the way current tools are being developed and used. Today's AI landscape is missing the creative innovations of communities, entrepreneurs, and small businesses everywhere because access to and trust in these potentially transformative tools is so low.

We can do so much better.

Public AI provides an opportunity for ordinary people to have a say in the AI future they want to live in. It gives public institutions a clear path to lead in harnessing the economic, scientific, and social benefits of advanced AI in service of all of us. AI that is permanently publicly accessible and accountable is worthy of the public trust. It provides a reliable foundation upon which new modes of creating, researching, and connecting can be built.

Public AI is already happening, and it's just getting started.

# APPENDIX 1: PUBLIC AI IN THE WORLD

Public AI is being built all around the world as countries recognise the importance of providing the requisite infrastructure for AI that ensures their security, the flourishing of their business and technology communities, and the position of their values and culture within their technology stack.

Launched in May 2017, AI Singapore team builds national AI infrastructure, including the SEA-LION (Southeast Asian Languages In One Network) family of open source LLMs that are specifically pre-trained and instruct-tuned for the Southeast Asian (SEA) region. It caters to under-represented population groups and low resource languages in the SEA region.

Singapore - AI Singapore  
[aisingapore.org](http://aisingapore.org)

The US National Artificial Intelligence Research Resource (NAIRR) pilot aims to address US researcher needs by increasing access to AI-related infrastructure resources including computational capabilities, AI-ready datasets, pre-trained models, software systems and platforms. It brings together government-supported and non-governmental contributed resources in phases over a two year period.

USA - NAIRR Pilot  
[nairrpilot.org/about](http://nairrpilot.org/about)

The Swiss AI Initiative describes itself as leveraging the world's most AI-capable supercomputer to build capacities for advanced and large-scale AI systems for the benefit of society. The project commits over ten million GPU hours to foundation models for science, education, robotics, health and sustainability.

Switzerland - Swiss AI  
[swiss-ai.org](http://swiss-ai.org)

AuroraGPT is an ambitious large language model project under development at Argonne National Laboratory, a U.S. Department of Energy facility near Chicago. By leveraging supercomputing power and focusing on scientific data, the project aims to create AI models specifically tailored for scientific applications, potentially opening new avenues for research and development across various scientific fields.

USA - AuroraGPT  
[lifearchitect.ai/auroragpt](http://lifearchitect.ai/auroragpt)

# ACKNOWLEDGEMENTS

This report was produced by collaborators at the Public AI Network ([publicai.network](https://publicai.network)). The network brings together academic, industry, and policy perspectives from a range of individuals and institutions. This report does not represent the views of those institutions.

Brandon Jackson, Metagov  
B Cavello, The Aspen Institute  
Nick Garcia, Public Knowledge  
Joshua Tan, Metagov  
SJ Klein, Berkman Klein Center  
Alex Krasodomski, Chatham House  
Flynn Devine  
Eleanor Tursman, The Aspen Institute

For correspondence, write to  
[<info@publicai.network>](mailto:<info@publicai.network>)

We would like to thank the following people for their support, contributions, and feedback:

Alek Tarkowski, Ankita Anirban, Audrey Tang, Lucy Bernholz, Avani Gadani, Aviv Ovadya, Bruce Schneier, Chris Smoak, Christine Borgman, David Eaves, David Weinberger, Diane Coyle, Ganesh Sitaraman, Govind Shivkumar, Hannah O'Rourke, Haydn Belfield, Jamie Joyce, Jasmine Sun, Joshua Entsminger, Joshua Stern, Julia Angwin, Karen Huang, Kevin O'Neill, Lawrence Lessig, Mercedes Bünz, Nathan Sanders, Natalie Buda Smith, Nick Vincent, Nik Marda, Rick Stevens, Robin Berjon, Sarah Harris, Sarah Schwettmann, Sean Blagsvedt, and Shannon Hong.

We are extremely grateful to the extended Public AI Network for comments and contributions over the past year—and hope you will consider joining our shared effort.

# BIBLIOGRAPHY

- 'A Roadmap to Democratic AI - 2024'. Collective Intelligence Project, March 2024. <https://cip.org/research/ai-roadmap>.
- Abbate, Janet. *Inventing the Internet*. MIT Press, 2000. [https://www.google.co.uk/books/edition/\\_Inventing\\_the\\_Internet/E2BdY6WQo4AC?hl=en](https://www.google.co.uk/books/edition/_Inventing_the_Internet/E2BdY6WQo4AC?hl=en).
- Acemoglu, Daron, and Simon Johnson. *Power and Progress: Our Thousand-Year Struggle over Technology and Prosperity*. New York: PublicAffairs, 2023.
- Acemoglu, Daron, and Pascual Restrepo. 'The Race between Man and Machine: Implications of Technology for Growth, Factor Shares, and Employment'. *American Economic Review* 108, no. 6 (June 2018): 1488–1542. <https://doi.org/10.1257/aer.20160696>.
- AI & Democracy Foundation, Democracy Levels Working Group. 'Democracy Levels for AI', 2024. <https://levels.aidemocracyfoundation.org/>
- 'AI Foundation Models: Initial Report'. London: UK Competition and Markets Authority, 18 September 2023. [https://assets.publishing.service.gov.uk/media/650449e86771b90014fdab4c/Full\\_Non-Confidential\\_Report\\_PDFA.pdf](https://assets.publishing.service.gov.uk/media/650449e86771b90014fdab4c/Full_Non-Confidential_Report_PDFA.pdf).
- AI Standards Hub. 'About the AI Standards Hub', 2024. <https://aistandardshub.org/the-ai-standards-hub/>.
- 'Algorithmic Accountability for the Public Sector'. Ada Lovelace Institute, AI Now Institute and Open Government Partnership, 2021. <https://www.adalovelaceinstitute.org/project/algorithmic-accountability-public-sector/>.
- American Library Association. 'Library Bill of Rights', 29 January 2019. <https://www.ala.org/advocacy/intfreedom/librarybill>.
- Anderljung, Markus, Everett Thornton Smith, Joe O'Brien, Lisa Soder, Benjamin Bucknall, Emma Bluemke, Jonas Schuett, Robert Trager, Lacey Strahm, and Rumman Chowdhury. 'Towards Publicly Accountable Frontier LLMs: Building an External Scrutiny Ecosystem under the ASPIRE Framework'. arXiv, 15 November 2023. <http://arxiv.org/abs/2311.14711>.
- Angell, Nate. 'Making AI Work for Creators and the Commons'. Creative Commons, 7 October 2023. <https://creativecommons.org/2023/10/07/making-ai-work-for-creators-and-the-commons/>.
- Bahri, Yasaman, Ethan Dyer, Jared Kaplan, Jaehoon Lee, and Utkarsh Sharma. 'Explaining Neural Scaling Laws'. *Proceedings of the National Academy of Sciences* 121, no. 27 (2 July 2024): e2311878121. <https://doi.org/10.1073/pnas.2311878121>.
- BBC. 'Mission, Values and Public Purposes', n.d. <https://www.bbc.com/aboutthebbc/governance/bbc.com/aboutthebbc/governance/mission/>.
- Belfield, Haydn. 'Great British Cloud and BritGPT: The UK's AI Industrial Strategy Must Play to Our Strengths'. *Labour Long Term*, May 2023. <https://www.labourlongterm.org/briefings/great-british-cloud-and-britgpt-the-uks-ai-industrial-strategy-must-play-to-our-strengths>.
- Berners-Lee, T. 'WWW: Past, Present, and Future'. *Computer* 29, no. 10 (October 1996): 69–77. <https://doi.org/10.1109/2.539724>.
- Besiroglu, Tamay, Sage Andrus Bergerson, Amelia Michael, Lennart Heim, Xueyun Luo, and Neil Thompson. 'The Compute Divide in Machine Learning: A Threat to Academic Contribution and Scrutiny?' arXiv, 8 January 2024. <https://doi.org/10.48550/arXiv.2401.02452>.
- Blagsvedt, Sean. 'AI Workflow Standards'. Gooey.ai, July 2024. <https://blog.gooey.ai/workflow-standards>.
- Bowker, Geoffrey C., Karen Baker, Florence Millerand, and David Ribes. 'Toward Information Infrastructure Studies: Ways of Knowing in a Networked Environment'. In *International Handbook of Internet Research*, 97–117. 2010. [https://doi.org/10.1007/978-1-4020-9789-8\\_5](https://doi.org/10.1007/978-1-4020-9789-8_5).
- Brennan Center for Justice. 'Artificial Intelligence Legislation Tracker'. Brennan Center for Justice, 24 October 2023. <https://www.brennancenter.org/our-work/research-reports/artificial-intelligence-legislation-tracker>.
- Briggs, Asa. *The BBC: The First Fifty Years*. Oxford: Oxford University Press, 1985.
- CERN. 'Tim Berners-Lee's Proposal'. Accessed 2

- October 2024. <https://info.cern.ch/Proposal.html>.
- Chan, Alan, Herbie Bradley, and Nitarshan Rajkumar. 'Reclaiming the Digital Commons: A Public Data Trust for Training Data'. arXiv, 21 May 2023. <https://doi.org/10.48550/arXiv.2303.09001>.
- Crawford, Kate. 'Atlas of AI'. *Yale University Press London* (blog), 11 October 2022. <https://yalebooks.co.uk/9780300264630/atlas-of-ai>.
- Coyle, Diane. 'The Public Option'. Royal Institute of Philosophy Supplements (May 2022). <https://doi.org/10.1017/S1358246121000394>
- Data Trusts Initiative. 'About', n.d. <https://datatrusts.uk/about/>.
- Data.gov. 'About Us'. Accessed 29 July 2024. <https://data.gov/about/>.
- Delamothe, Tony. 'Founding Principles'. *BMJ : British Medical Journal* 336, no. 7655 (31 May 2008): 1216–18. <https://doi.org/10.1136/bmj.39582.501192.94>.
- Delgado, Fernando, Stephen Yang, Michael Madaio, and Qian Yang. 'The Participatory Turn in AI Design: Theoretical Foundations and the Current State of Practice'. In *Proceedings of the 3rd ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization*, 1–23. EAAMO '23. New York, NY, USA: Association for Computing Machinery, 2023. <https://doi.org/10.1145/3617694.3623261>.
- Digital Public Goods Alliance. 'Digital Public Goods Standard', 21 September 2020. <https://digitalpublicgoods.net/standard/>.
- 'Digital Public Goods for the SDGs'. United Nations Development Programme, 2023. <https://www.undp.org/publications/digital-public-goods-sdgs>.
- Doctorow, Cory. 'The "Enshittification" of TikTok'. *Wired*, 23 January 2023. <https://www.wired.com/story/tiktok-platforms-cory-doctorow/>.
- Eaves, David, Marianna Mazzucato, and Beatriz Vasconcellos. 'Digital Public Infrastructure and Public Value: What Is "Public" about DPI?' London: UCL Institute for Innovation and Public Purpose, 21 March 2024. <https://www.ucl.ac.uk/bartlett/public-purpose/publications/2024/mar/digital-public-infrastructure-and-public-value-what-public-about-dpi>.
- Energy.gov. 'DOE Advancing Safe and Secure AI Research Infrastructure Through the National Artificial Intelligence Research Resource Pilot', n.d. <https://www.energy.gov/articles/doe-advancing-safe-and-secure-ai-research-infrastructure-through-national-artificial>.
- 'Exploring Legal Mechanisms for Data Stewardship'. Ada Lovelace Institute, 4 March 2021. <https://www.adalovelaceinstitute.org/report/legal-mechanisms-data-stewardship/>.
- Falco, Gregory, Ben Schneiderman, Julia Badger, Ryan Carrier, Anton Dahbura, David Danks, Martin Eling, et al. 'Governing AI Safety through Independent Audits'. *Nature Machine Intelligence* 3, no. 7 (July 2021): 566–71. <https://doi.org/10.1038/s42256-021-00370-7>.
- Federal Communications Commission. 'Universal Service', n.d. <https://www.fcc.gov/general/universal-service>.
- Frischmann, Brett. *Infrastructure: The Social Value of Shared Resources*, 2012.
- Futurism. 'Study Finds Consumers Are Actively Turned Off by Products That Use AI', 31 July 2024. <https://futurism.com/the-byte/study-consumers-turned-off-products-ai>.
- Ganguli, Deep, Saffron Huang, Lovitt, and Divya Siddarth. 'Collective Constitutional AI: Aligning a Language Model with Public Input', 17 October 2023. <https://www.anthropic.com/news/collective-constitutional-ai-aligning-a-language-model-with-public-input>.
- Gerstein, Daneil, and Erin Leidy. *Emerging Technology and Risk Analysis: Artificial Intelligence and Critical Infrastructure*. RAND Corporation, 2024. <https://doi.org/10.7249/RRA2873-1>.
- Gilman, Michele. 'Democratizing AI: Principles for Meaningful Public Participation'. Data & Society, 27 September 2023. <https://datasociety.net/library/democratizing-ai-principles-for-meaningful-public-participation/>.
- Goodman, Ellen. 'AI Accountability Policy Report'. National Telecommunications and Information Administration, March 2024. <https://www.ntia.gov/issues/artificial-intelligence/ai-accountability-policy-report>.
- Gordon, Robert J. *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War*. Princeton Economic History of the Western World. Princeton: Princeton

- University Press, 2016.
- 'GPT-SW3', n.d. <https://www.ai.se/en/project/gpt-sw3>.
- Henkin, David M. *The Postal Age: The Emergence of Modern Communications in Nineteenth-Century America*. Chicago: University Of Chicago Press, 2006.
- Henshall, Will. 'Google DeepMind's AlphaFold 3 Could Transform Drug Discovery'. *TIME*, 8 May 2024. <https://time.com/6975934/google-deepmind-alphaFold-3-ai/>.
- Innovation, Science and Economic Development Canada. 'Consultation on Artificial Intelligence (AI) Compute'. Innovation, Science and Economic Development Canada, 26 June 2024. <https://ised-isde.canada.ca/site/ised/en/public-consultations/consultation-artificial-intelligence-ai-compute>.
- Ivanova, Victoria, Eva Jäger, Alasdair Milne, and Gary Zhixi Zhang. 'Future Art Ecosystems 4: Art x Public AI'. London: Serpentine Arts Technologies, March 2024. <https://reader.futureartecosystems.org/briefing/fae4/introduction>.
- Jackson, Brandon. 'The UK Needs a "British AI Corporation", Modelled on the BBC'. In *Artificial Intelligence and the Challenge for Global Governance*. Chatham House, 2024. <https://www.chathamhouse.org/2024/06/artificial-intelligence-and-challenge-global-governance/07-uk-needs-british-ai-corporation>.
- Jones, Elliot. 'A "CERN for AI"'. In *Artificial Intelligence and the Challenge for Global Governance*. Chatham House, 2024. <https://www.chathamhouse.org/2024/06/artificial-intelligence-and-challenge-global-governance/02-cern-ai-what-might-international>.
- Jung, Carsten, and Bhargav Srinivasa Desikan. 'Transformed by AI: How Generative Artificial Intelligence Could Affect Work in the UK – and How to Manage It'. Institute for Public Policy Research, 27 March 2024. <https://www.ippr.org/articles/transformed-by-ai>.
- Kak, Amba. 'AI Nationalism(s): Global Industrial Policy Approaches to AI'. AI Now Institute, 12 March 2024. <https://ainowinstitute.org/ai-nationalisms>.
- Kak, Amba, and Sarah Myers West. 'AI Now 2023 Landscape: Confronting Tech Power'. AI Now Institute, 11 April 2023. <https://ainowinstitute.org/2023-landscape>.
- Keller, Paul, and Alek Tarkowski. 'The Paradox of Open'. Open Future, March 2021. <https://paradox.openfuture.eu/>.
- Kennedy, John Fitzgerald. 'Address at Rice University on the Nation's Space Effort'. Houston, TX, 12 September 1962. <https://www.jfklibrary.org/learn/about-jfk/historic-speeches/address-at-rice-university-on-the-nations-space-effort>.
- Khan, Thalia. 'From Code to Consumer: PAI's Value Chain Analysis Illuminates Generative AI's Key Players'. Partnership on AI, 11 July 2024. <https://partnershiponai.org/from-code-to-consumer-pais-value-chain-analysis-illuminates-generative-ais-key-players/>.
- Lazar, Seth, and Alondra Nelson. 'AI Safety on Whose Terms?' *Science* 381, no. 6654 (14 July 2023): 138–138. <https://doi.org/10.1126/science.adl8982>.
- Longpre, Shayne, Robert Mahari, Ariel Lee, Campbell Lund, Hamidah Oderinwale, William Brannon, Nayan Saxena, et al. 'Consent in Crisis: The Rapid Decline of the AI Data Commons'. Data Provenance Initiative, July 2024.
- Macon-Cooney, Benedict, Axel Heitmueller, Darcy Ward, Luke Stanley, and Henry Li. 'A New National Purpose: Harnessing Data for Health'. Tony Blair Institute, 21 May 2024. <https://www.institute.global/insights/politics-and-governance/a-new-national-purpose-harnessing-data-for-health>.
- Mazzucato, Mariana. *Mission Economy: A Moonshot Guide to Changing Capitalism*. London: Penguin, 2020.
- Narechania, Tejas, and Ganesh Sitaraman. 'An Antimonopoly Approach to Governing Artificial Intelligence'. Vanderbilt Policy Accelerator for Political Economy & Regulation, 7 November 2023. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4597080](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4597080).
- National Artificial Intelligence Research Resource Task Force. 'Strengthening and Democratizing the U.S. Artificial Intelligence Innovation Ecosystem: An Implementation Plan for a National Artificial Intelligence Research Resource'. The White House, 24 January 2023. <https://www.ai.gov/wp-content/>

- uploads/2023/01/NAIRR-TF-Final-Report-2023.pdf.
- 'New Study Shows NIH Investment in New Drug Approvals Is Comparable to Investment by Pharmaceutical Industry', 28 April 2023. <https://www.bentley.edu/news/new-study-shows-nih-investment-new-drug-approvals-comparable-investment-pharmaceutical>.
- Newson, Nicola. 'River Pollution and the Regulation of Private Water Companies'. *House of Lords Library*, 19 February 2024. <https://lordslibrary.parliament.uk/river-pollution-and-the-regulation-of-private-water-companies/>.
- O'Brien-Powers, Owen. 'Who Will Monitor the AI Monitors? And What Should They Watch?' *American Enterprise Institute* (blog), 11 April 2024. <https://www.aei.org/technology-and-innovation/who-will-monitor-the-ai-monitors-and-what-should-they-watch/>.
- OECD Legal Instruments. 'Recommendation of the Council on Artificial Intelligence', 3 May 2024. <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449>.
- Open Source Initiative. 'The Open Source AI Definition – Draft v. 0.0.9', n.d. <https://opensource.org/deepdive/drafts/open-source-ai-definition-draft-v-0-0-9>.
- OpenAI. 'Preserving Languages for the Future'. Accessed 3 October 2024. <https://openai.com/index/government-of-iceland/>.
- Ovadya, Aviv. 'Reimagining Democracy for AI'. *Journal of Democracy* 34, no. 4 (2023): 162–70.
- Perez, Carlota. *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*. Cheltenham: Edward Elgar Publishing Ltd, 2003.
- Princeton Engineering. 'Engineers Use AI to Wrangle Fusion Power for the Grid'. n.d. <https://engineering.princeton.edu/news/2024/02/21/engineers-use-ai-wrangle-fusion-power-grid>.
- Public AI Network. 'Public AI Network'. Accessed 2 August 2024. <https://publicai.network/>.
- Rahman, K. Sabeel. 'The New Utilities: Private Power, Social Infrastructure, and the Revival of the Public Utility Concept'. SSRN Scholarly Paper. Rochester, NY, 9 April 2018. <https://papers.ssrn.com/abstract=2986387>.
- Ricks, Morgan, Ganesh Sitaraman, and Shelley Welton Lev Menand. *Networks, Platforms, and Utilities: Law and Policy*, 2022.
- Rikap, Cecilia. 'Dynamics of Corporate Governance Beyond Ownership in AI'. London: Common Wealth, 15 May 2024. <https://www.common-wealth.org/publications/dynamics-of-corporate-governance-beyond-ownership-in-ai>.
- Sahlgren, Magnus. 'Public AI Seminar: GPT-SW3'. 24 September 2024. <http://archive.org/details/public-ai-sahlgren>.
- Sawhney, Harmeet, and Hamid R. Ekbia. *Universal Access and Its Asymmetries*. The MIT Press, 2022. <https://doi.org/10.7551/mitpress/11281.001.0001>.
- Schneier, Bruce, and Nathan E. Sanders. 'Build AI by the People, for the People'. *Foreign Policy*, 12 June 2023. <https://foreignpolicy.com/2023/06/12/ai-regulation-technology-us-china-eu-governance/>.
- 'SEA-LION - AI Singapore', 20 November 2023. <https://aisingapore.org/aiproducts/sea-lion/>.
- Seger, Elizabeth, and Maria Axente. 'AI - Trustworthy By Design: How to Build Trust in AI Systems, the Institutions That Create Them and the Communities That Use Them'. Demos, 24 July 2024. <https://demos.co.uk/research/ai-trustworthy-by-design-how-to-build-trust-in-ai-systems-the-institutions-that-create-them-and-the-communities-that-use-them/>.
- Seger, Elizabeth, Aviv Ovadya, Ben Garfinkel, Divya Siddarth, and Allan Dafoe. 'Democratising AI: Multiple Meanings, Goals, and Methods', 22 March 2023. <https://arxiv.org/abs/2303.12642>.
- 'Shaping the Future of Learning: The Role of AI in Education 4.0'. World Economic Forum, 28 April 2024. <https://www.weforum.org/publications/shaping-the-future-of-learning-the-role-of-ai-in-education-4-0/>.
- Sitaraman, Ganesh, and Anne Alstott. *The Public Option: How to Expand Freedom, Increase Opportunity, and Promote Equality*. Cambridge, Massachusetts: Harvard University Press, 2019. <https://www.degruyter.com/doc/cover/9780674240568.jpg>.
- Sloane, Mona, Emanuel Moss, Olaitan Awomolo, and Laura Forlano. 'Participation Is Not a Design Fix for Machine Learning'. arXiv, 11 August 2020. <https://doi.org/10.48550/arXiv.2007.02423>.
- Smith, Matthew. 'Britons Lack Confidence That AI Can Be Developed and Regulated Responsibly'. YouGov, 1 November 2023. <https://yougov.com>.

- co.uk/technology/articles/47744-britons-lack-confidence-that-ai-can-be-developed-and-regulated-responsibly.
- Surman, Mark, Ayah Bdeir, Lindsey Dodson, Alexis-Brianna Felix, and Nik Marda. 'Accelerating Progress Toward Trustworthy AI'. Mozilla Foundation, 22 February 2024. <https://foundation.mozilla.org/en/research/library/accelerating-progress-toward-trustworthy-ai/whitepaper/>.
- 'Swiss AI Initiative', n.d. <https://www.swiss-ai.org>.
- Tarkowski, Alek, Paul Keller, and Francesco Vogelezang. 'Public Data Commons'. Open Future, 24 May 2022. <https://openfuture.eu/publication/public-data-commons>.
- The Alan Turing Institute. 'Turing 2.0: Changing the World for the Better with Data Science and AI', March 2023. [https://www.turing.ac.uk/sites/default/files/2023-03/turing\\_2.0\\_-\\_executive\\_summary\\_-\\_final\\_21.03.pdf](https://www.turing.ac.uk/sites/default/files/2023-03/turing_2.0_-_executive_summary_-_final_21.03.pdf).
- The White House. Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence (2023). <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/>.
- Tilley, Sarah E. Needleman and Aaron. 'Apple Changes Its App Store Policy. Critics Call the Moves "Outrageous."' WSJ, 17 January 2024. <https://www.wsj.com/tech/apple-changes-its-app-store-policy-critics-call-the-moves-outrageous-7c023e0c>.
- Tomašev, Nenad, Julien Cornebise, Frank Hutter, Shakir Mohamed, Angela Picciariello, Bec Connelly, Danielle C. M. Belgrave, et al. 'AI for Social Good: Unlocking the Opportunity for Positive Impact'. *Nature Communications* 11, no. 1 (18 May 2020): 2468. <https://doi.org/10.1038/s41467-020-15871-z>.
- Tumadóttir, Anna. 'Questions for Consideration on AI & the Commons'. Creative Commons, 24 July 2024. <https://creativecommons.org/2024/07/24/preferencesignals/>.
- Tyson, Alec, and Emma Kikuchi. 'Growing Public Concern about the Role of Artificial Intelligence in Daily Life'. Pew Research Center, 28 August 2023. <https://www.pewresearch.org/short-reads/2023/08/28/growing-public-concern-about-the-role-of-artificial-intelligence-in-daily-life/>.
- UK Centre for Data Ethics and Innovation. 'Public Attitudes to Data and AI: Tracker Survey (Wave 3)'. GOV.UK, 12 February 2024. <https://www.gov.uk/government/publications/public-attitudes-to-data-and-ai-tracker-survey-wave-3/public-attitudes-to-data-and-ai-tracker-survey-wave-3>.
- Vinuesa, Ricardo, Hossein Azizpour, Iolanda Leite, Madeline Balaam, Virginia Dignum, Sami Domisch, Anna Felländer, Simone Daniela Langhans, Max Tegmark, and Francesco Fuso Nerini. 'The Role of Artificial Intelligence in Achieving the Sustainable Development Goals'. *Nature Communications* 11, no. 1 (13 January 2020): 233. <https://doi.org/10.1038/s41467-019-14108-y>.
- Vynck, Gerrit De, and Will Oremus. 'As AI Booms, Tech Firms Are Laying off Their Ethicists'. *Washington Post*, 30 March 2023. <https://www.washingtonpost.com/technology/2023/03/30/tech-companies-cut-ai-ethics/>.
- Weatherbed, Jess. 'Meta Won't Release Its Multimodal Llama AI Model in the EU'. The Verge, 18 July 2024. <https://www.theverge.com/2024/7/18/24201041/meta-multimodal-llama-ai-model-launch-eu-regulations>.
- White House Office of Science and Technology Policy. 'Blueprint for an AI Bill of Rights'. The White House, 4 October 2022. <https://www.whitehouse.gov/ostp/ai-bill-of-rights/>.
- Widder, David Gray, Sarah West, and Meredith Whittaker. 'Open (For Business): Big Tech, Concentrated Power, and the Political Economy of Open AI'. SSRN Scholarly Paper. Rochester, NY, 17 August 2023. <https://doi.org/10.2139/ssrn.4543807>.
- Wu, Tim. *The Master Switch*. Penguin, 2011.



# Public AI.

THE NEXT GENERATION OF  
PUBLIC INFRASTRUCTURE

THE PUBLIC AI NETWORK

AUGUST 2024

UPDATED OCTOBER 2024