

“A Message from our CEO”

Sundar Pichai’s vanguard visions of global AI futures powered by Google

Sebastian Wucherer

Common ground: a quick introduction

Google, by far the largest of Alphabet Inc.’s many subsidiary companies, is not your average company. In 2024 alone, Alphabet and its 183,000 employees generated a total of over \$350 billion in revenue (Alphabet 2025), a figure that rivals many major nations’ total tax revenues. Beyond its financial power, Google has profoundly influenced society and has shaped global thinking, economic activities, and governance through its algorithms (Schroeder 2014; Mager 2017; Mager, Norocel, and Rogers 2023). *Googling* has been a globally used synonym for online information searches for more than two decades now. I use Google products on a daily, if not hourly, basis. Google knows where I live, where I work, it knows most of my passwords, it even has two of my fingerprints, has managed my daily schedule since 2016, and much more besides. Am I a hypocrite if I am still critical of this company that is currently, whatever way you look at it, an essential part of my life? I do not think so. This chapter is not about pointing the fingers of blame. As Bruno Latour wrote, “[t]he critic is not the one who lifts the rugs from under the feet of the naive believers, but the one who offers the participants arenas in which to gather” (Latour 2004, 246). Instead of condemning Google outright, this chapter is instead an invitation to take a step back and to reflect on the ways in which Google and its CEO since 2015, Sundar Pichai, think about our world – how it is today, what it should become, what its future will be shaped by, and for what purposes.

To that end, I will turn to Google’s own blog *The Keyword* (Google 2025a), of which I have examined 51 contributions that were published in its self-explanatory category, entitled *A message from our CEO* (Google 2025b).¹ I have also included two other con-

1 At the time of writing in early 2025, 53 contributions have been published under *A message from our CEO* in total, two of which were excluded from my study as one of them was printed in Spanish and the other is primarily a video.

tributions from the same blog concerning Google's AI strategy (Pichai 2018; Manyika et al. 2023). Each piece was given an ID and was arranged chronologically; 'A1a' refers to the first additional piece from 2018, while 'A53' refers to the most recent blog contribution from February 2025 (for a full overview, see Wucherer 2025).

Groundwork: some literature

For quite some time, common sense held that societal change simply just happens to societies, and the power to drive it was often attributed to technology. This asymmetrical understanding of sociotechnical change has been termed *technological determinism* (Smith and Marx 1994; Wyatt 2008). This view has now widely been superseded by a more symmetrical view on how sociotechnical processes come about and was challenged by Science and Technology Studies (STS) in specific (see Jasanoff 2004a; 2004b among many others). However, Wyatt (2008, 167) states that leaders in science, politics, and the corporate world still often advocate for views that lean into technological determinism heavily. She calls for continuing efforts to challenge these views by explaining how “[o]ne of the most misleading and dangerous aspects of technological determinism is its equation of technological change with progress” (Wyatt 2008, 172). Many scholars who advance the strand of literature on the subtle, albeit powerful, role that visions and imaginaries of the future play in shaping such futures (Taylor 2002; Jasanoff and Kim 2009, 2015; Verschraegen et al. 2017) have followed Wyatt's call, particularly those from STS traditions (see McNeil et al. 2017). Hilgartner (2015) has coined the concepts of the *Sociotechnical Vanguard* (SV) and their *Vanguard Visions* (VV) in order to account for the crucial role that some specific actors can have in shaping broader imaginaries. SVs are defined as “relatively small collectives that formulate and act intentionally to realize particular sociotechnical visions of the future that have yet to be accepted by wider collectives, such as the nation” (Hilgartner 2015, 34). VVs, then, are those specific visions and imaginaries for which SVs advocate. I conceive of Google as one such SV, spearheaded or represented by its CEO, Sundar Pichai.

Individuals with power in particular often “assume a visionary role, performing the identity of one who possesses superior knowledge of emerging technologies and aspires to realize their desirable potential” (Hilgartner 2015, 34), often tapping into what has been described as technological solutionism (Nachtwey and Seidl 2024, 92). Specifically, many SVs in big tech try “narrowing down the contingency of the future in a way that is in line with the company's business objectives” (Haupt 2021, 239) in order to “not only [...] propose a future that users, business partners and the public can collectively expect, but they also disguise the company's aspiration for profit and power as a necessity on the path to a better world” (ibid.). Such prophetic corporations, as Haupt (2021) calls them, increasingly take issue with the current po-

litical and institutional environments in which they find themselves (Srnicek 2017; Huberman 2022; Kohl 2017). It is this field of friction that led Zuboff to coin the term surveillance capitalism (Zuboff 2015; 2019), the phenomenon of organizations generating, commodifying and instrumentalizing data concerned with human behavior for primarily commercial ends. Zuboff has also stressed Google's seminal role in surveillance capitalism's invention:

"Google invented and perfected surveillance capitalism [and was its] pioneer [...] in thought and practice, the deep pocket for research and development, and the trailblazer in experimentation and implementation, but it is no longer the only actor on this path" (Zuboff 2019, 9).

As a result, and even more so with AI having taken center stage in the public arena, big tech in specific has been increasingly viewed critically, both inside and outside academia (Lindgren 2023). I want to contribute to this larger discussion by focusing on Google and AI and on how big tech shapes sociotechnical futures by blending specific sets of ideas in order to promote certain future visions.

Making ground: analyzing the messages

Tech that helps

The title "A message from our CEO" has a prophetic quality, evoking a nameless, distant being – *our CEO* – who directs his ethereal messages to employees somewhere out there. Hilgartner states that even VVs actually need some real grounding, being "more likely to gain traction if [...] tied to entities and expectations familiar enough to provide an intelligible guide to the imagined future" (Hilgartner 2015, 40). Pichai automatically inherited a given set of 'entities and expectations' from Google, unlike other leading personalities in Silicon Valley, given that he did not establish the company that he leads. Paramount to this is Google's enduring mission statement, the "timeless vision" (A24) that "Larry [Page] and Sergey [Brin] first wrote down [...] 25 years ago" (A40): to "organize the world's information and make it universally accessible and useful" (Google 2025c). This mission/vision functions as the ideological cornerstone and is recounted habitually throughout the entire corpus examined with little variation (A8, A12, A13, A17, A21, A24, A32c, A33, A37, A39, A40, A47, and A53).

Pichai often draws upon a second important legacy: his personal life story. While describing himself as "a technology optimist" (A16, also in A7, A27, A30, A53), he locates technology at the core of both progress and wellbeing: "Expanding opportunity through technology is deeply personal to me. That's because I grew up with-

out much access to it. Every new technology—from the rotary phone to the television—changed my family’s life for the better” (A16, but also in A17, A21, A49, A53). For him, technology is a harbinger of progress, and access thereto marks the beginning of better times. His belief in technology, Pichai explains, was ultimately pivotal to walking the path that led him to becoming Google’s CEO:

“I saw the positive impact technology could have to make things better. It set me on a course that would bring me to the U.S., and eventually to a growing start-up called Google. I couldn’t have imagined then that one day I would toast three Google colleagues their Nobel Prizes, or take my parents for a ride in a driverless car” (A53).

Pichai utilizes repeatedly his individual success story to substantiate his belief that access to technology equates to societal progress. Similarly to the citation above, he claims that “every new innovation—from the rotary phone to the refrigerator—improved my family’s life” (A21) while “[t]he technology that changed my life the most was the computer” (A49). He furthermore explains that “[a]s technology improves, so will the benefits” (A49), and that “[w]e believe a strong digital future is one where everyone has access to technology and the skills to use it, where the internet economy fulfils its immense potential” (A20). Regarding an investment in Africa, he aims for these investments to “ensure [that] every person in Africa can shape and share in the opportunities technology creates” (A21), while similar investments in Latin America were justified through an explanation that he had “always believed technology is a powerful enabler for businesses and communities” (A25). AI also gets described as one such “powerful enabler” (A37). Pichai generally believes in “how people can harness [technology] for good” (A16). Thus, access to technology – and most certainly Google’s technology – is indispensable and is even *prescriptive* for Pichai’s (rather linear) idea of positive social change.

He does show some reflexivity about this framing, claiming that “I’ve always thought computers should be adapting to people, not the other way around” (A24). However, more often than not, his statements imply that local practices (should) follow new materialities; for example, “I believe that technology is a foundational enabler of progress” (A49), and “[i]mproving lives through technology is personal for me” (A53). His optimism about people’s – not just technologies’ – power to enable change is mentioned somewhat infrequently: “I’m still optimistic about our future. That’s because I believe in people. Throughout history, people have made the impossible, possible” (A19). Yet, right after this remark, he adds that “[t]he other bright spot [in fighting climate change] is technology” (A19), and Pichai had “been thinking a lot about how far technology has come over the last 25 years and how people adapt to it” (A40) on the occasion of Google’s 25th birthday.

This conception of sociotechnical change necessitates increasingly shorter innovation logics, especially for commercial actors (Sveiby, Gripenberg, and Segercrantz 2012a; 2012b), and is prone to exacerbate more profound kinds of change. Sociologist Hartmut Rosa's concept of the hyper-accelerated standstill described this as a symptom of modern high-speed societies in which "no new visions and energies [are] available to modern society and hence the enormous speed of events and alterations is a superficial phenomenon barely covering up deep-rooted cultural and structural inertia" (Rosa 2003, 17).

These narratives of technological determinism and socioeconomic change allow Pichai to craft what is perhaps his most frequently deployed notion: *tech that helps*. "Google products are built to help" (A24) is just one instance of a whopping 359 times that the verb *to help* is used throughout the material. This claim integrates a moral dimension into Google's technologies, presenting them as tools that ultimately only exist to do *good* in the world. Addressing some criticism towards AI, for example, Pichai explains:

"Designing products that help people at scale is both a privilege and a responsibility. People have their own questions: Can we trust these new technologies? We think deeply about how to build responsible technology from the start, whether it's making sure everyone's information is protected and secure, or keeping people safe from bad actors online. [...] Our development and use of AI must address these risks, and help to develop the technology responsibly. The AI principles we launched in 2018 are an important part of how we do this. These principles prompt questions like: Will it be helpful to people and benefit society, or could it lead to harm in any way?" (A40).

The idea that tech only *helps* is key to Pichai's ability to claim that what is at the heart of Google's activities is nothing but the attainment of (effectively unassailable) ideals like inclusivity, people's 'happiness,' prosperity, or sustainability. What is striking in the case of Google, though, is the universality of these aspirations, as Pichai repeatedly presents his belief that especially AI is poised to "benefit everyone, everywhere" (A51). More generally, the idea is also "to approach [our] mission with a singular goal: building a more helpful Google, for everyone. That means being helpful to people in the moments that matter and giving everyone the tools to increase their knowledge, success, health and happiness" (A12). Similarly, during the pandemic, Pichai wrote that "we'll continue to help our communities—including our businesses, educators, researchers and nonprofits—to navigate the challenges ahead" (A2), and regarding climate change, Pichai claimed that "[w]e're proud to do our part, and to help move the world closer to a carbon-free future for all" (A7). The turn to AI has only intensified Pichai's use of this notion, as "[w]e've been applying AI to make our products

radically more helpful for a while. With generative AI, we're taking the next step" (A37).

In essence, *tech that helps* exemplifies what has been termed technological solutionism (Morozov 2013; Bartl 2023). Pichai does call for "important debates about how [...] technologies will shape our society" (A40), but potential problems remain to be solved, chiefly by technology – or, in his words: "Just as technology can create new threats, it can also help us fight them" (A38). In the end, it is technology that drives change, usually Google's: "I know that with greater access to smartphones and improved connectivity, there's no limit to what India's people can do. We look forward to getting technology into the hands of more people and to exploring what more we can achieve together in the years ahead" (A13).

Overall, Pichai paints a picture of Google not as a regular company, but as a morally driven agent of both global wellbeing and progress. Importantly, however, he mostly leaves unexamined the benefits/profits that occupying this role would allow Google to reap. During the early *Black Lives Matter* protests in 2020, Pichai stressed that "[a]s a company, and as individuals who came [to Google] to build helpful products for everyone, Google commits to translating the energy of this moment into lasting, meaningful change" (A6), again contextualizing 'meaningful change' with new technologies and also commercial success, albeit implicitly. The continuous emphasis on moral dimensions disassociates Google from its economic self-interests, which is key to being able to present Google as benevolent:

"We're optimistic that by harnessing new technologies, investing in the right infrastructure and tools, and empowering partners, nonprofits and people, this can be the most decisive decade for climate action yet. We're proud to do our part, and to help move the world closer to a carbon-free future for all" (A7).

What is being constructed, again and again, as being *helpful* is simultaneously being constructed as also being economically advantageous: "We know Google only succeeds when others do, and we'll continue to build the tools and technologies that help grow the economic pie, and create more opportunities for everyone" (A35). Pichai is also able to establish the idea that *markets* can be (made into) a force of good by presenting Google's technologies as both morally *good* and beneficial to economies. Following his narrative, consumer markets naturally favor products that provide both immediate and lasting benefits to humanity *at large*: "[O]ur goal is to make the sustainable choice an easier choice. At the individual level, these choices may seem small, but when people have the tools to make them at scale, they equal big improvements" (A16). This is not to accuse Google of 'bluwashing' (Berliner and Prakash 2015), but more involves explicating a subtle, but meaningful, shift from most traditional narratives: Instead of debating how societal progress and planetary sustainability are *compatible* with corporate success, at least in principle, Pichai instead

claims that Google's success in specific – while prepending moral inducements – generally *leads to it*.

However, emphasizing the ability to empower others to act *good* conceals underlying issues. One of them is rather simple: In Pichai's future visions, the demand for hardware, including infrastructure and data centers, will rise significantly, thereby posing questions about sustainably using natural resources. The second issue is more subtle; Pichai may claim that "we'll keep asking the big questions to help build a more sustainable future, and work to find answers with all of you" (A41), or he might promise that "[a]t Google, we will keep working to get technology into the hands of more businesses and communities and to create opportunities for all Americans" (A43).² However, Google's products can also be used in ways that run completely counter to Pichai's well-sounding intentions, even though as the company is portrayed as a selfless, helping, benevolent giant. This issue usually goes unmentioned or gets downplayed, with few exceptions (e.g., the additional material (A1a; A32a)). What is much more representative is Pichai's claim about how "[o]ur commitment to innovation, as well as our long-term focus and investment in AI, are paying off and driving success for the company and for our customers" (A51), and that Google makes "workers grow their skills and advance in their careers" (A45). Writing about AI more generally, the only scenario that Pichai imagines as being *bad* is, effectively, if not everyone uses it: "With AI, we have the chance to be inclusive from the start, and to ensure that the digital divide doesn't become an AI divide" (A49). Throughout most of the material, AI in particular is something that is so convincingly and generally beneficial that every socioeconomic and sociopolitical actor should fully subscribe themselves to spreading it to as many people as possible. I will examine this theme to a greater extent in the section that follows. All in all, the analysis urges us to be careful about quietly acquiescing to narratives like Pichai's story of *tech that helps*. While it is very difficult to object to, it subtly trivializes the natural ambiguity of the overall impact that Google's products and services may have.

The information-knowledge mindset

I now want to delve deeper into Pichai's understanding of what *information* and *knowledge* are and how they relate to each other and the world. To start with, Google's mission statement leads to Pichai's idea that – similarly to technology – access to information is generally desirable: "The idea that a student in rural Indonesia could access the same information as a professor at Stanford was revolutionary, and has changed lives and our world for the better" (A40). This is why, at least to

2 The blog contribution cited (A43) focused solely on US contexts. Hence, 'for all Americans' may well be reframed to 'opportunities for all Google customers.'

him, Google aims at “deepening our understanding of information so that we can turn it into knowledge; and advancing the state of computing, so that knowledge is easier to access, no matter who or where you are” (A24). Here, he presents a notion of information as raw material, something that is able to be processed into useable knowledge. Elsewhere, however, he writes about “engag[ing] with information, from language and images to video and audio” (A33). This contradicts the former conceptualization, as any video/audio is already a heavily processed form of information or knowledge. In yet another example discussing *Gemini*, the obscurity only grows:

“Unlocking knowledge across formats is why we built Gemini to be multimodal from the ground up. [...] Long context takes this a step further, enabling us to bring in even more information: hundreds of pages of text, hours of audio or an hour of video, entire code repos...or, if you want, roughly 96 Cheesecake Factory menus” (A47).

In this quote, knowledge is ‘unlocked’ from multimodal formats, which, again, necessarily includes already processed material like video/audio recordings. However, in the same article, these formats – from audio to restaurant menus – are suddenly considered information, something that was elsewhere framed more as raw material that is ready for processing. In another instance, with the goal of “unlocking entirely new questions that Search can answer, and creating increasingly helpful experiences that connect you to the richness of the web” (A37), Pichai wrote that “Google’s deep understanding of information combined with the unique capabilities of generative AI can transform how Search works yet again” (A37). It is once again unclear if information is here conceptualized descriptively or semantically. The main insight that I draw from these remarks, now, is that Google maintains surprisingly inconsistent notions of information and knowledge, even though it is described by Pichai himself as an ‘information company’ (A22).

Among other things, this conceptual vagueness enables Pichai to establish the claim that, for him, technology is virtually always able to translate any input into something that is useful for people. He strategically draws upon simple, close-to-life examples to substantiate this belief. For example, introducing AI-generated document summarization, Pichai explains how “[a]t Google, whenever I get a long document or email, I look for a TL;DR at the top—TL;DR is short for ‘Too Long, Didn’t Read.’ And it got us thinking, wouldn’t life be better if more things had a TL;DR?” (A24). This does pose questions about whether it is really as innocent as it sounds for someone as powerful as Pichai to rely on automated TL;DRs for any ‘long’ document or email that is placed on his desk, so to speak. Presenting AI-generated TL;DRs as a generally unproblematic tool greatly trivializes AI’s ability to process any given input. Additionally, it reveals how Pichai does not usually distinguish between techno-

logically accessible and technologically inaccessible kinds of information or knowledge. To him, what is relevant to any issue is usually also available to machines; this leads him to proclaim that "[o]ne of the most exciting opportunities is how AI can deepen our understanding of information and turn it into useful knowledge more efficiently—making it easier for people to get to the heart of what they're looking for and get things done" (A33). Similarly, Google's *Bard* sought

"to combine the breadth of the world's knowledge with the power, intelligence and creativity of our large language models. It draws on information from the web to provide fresh, high-quality responses. Bard can be an outlet for creativity, and a launchpad for curiosity" (A33).

Pichai elsewhere reassures the reader that Google would be "approaching [...] innovation responsibly, striving for the highest bar for information quality as we always have from the very beginning" (A37), while failing to substantiate what *quality* means to him with respect to information. One hint about this may be found in Pichai's effort to reify Google's mission as "[o]rganizing the world's information across every input, making it accessible via any output, and combining the world's information, with the information in YOUR world, in a way that's truly useful for you" (A47). Here, quality seems to come from correctly assembling the relevant parts of a finite pile of either information or knowledge. This overlooks how information or knowledge are often ambiguous or contextual and can, thus, be infinite and might be partly technologically unavailable. This notion is actually substantiated by Pichai himself when he writes that developers using Google's *Vertex AI* may improve their work in two ways: First, Google Search, which "provides high quality information to improve the accuracy of responses [*Vertex AI* gives]" (A44) and, second, "with your *own data and sources of truth*, such as enterprise applications like Workday or Salesforce and Google Cloud databases like BigQuery" (A44, my emphasis). It is here that Pichai lists exclusively technologically processable data as 'sources of truth,' while also vaguely acknowledging the contextuality of information or knowledge. This instance serves as the culmination of the confusion of information, knowledge, and how it represents the world and leads to the observation that, for Pichai, information or knowledge have two possible states: either 'locked' or "unlocked" (A45, A47) by or with technological means. Writing about a particular language model being "revolutionary in *understanding the intricacies* of human language" (A33, my emphasis) or that "[t]echnology begins to feel like a natural extension, *augmenting human capability*, bridging gaps in expertise and *experience*, and breaking down barriers like language and accessibility" (A53, my emphasis) substantiate this insight further. The material does not show if Pichai ultimately subscribes to the idea of technological limitations in the capturing and processing of information or knowledge. Instead, Pichai envisions Google's

technology as “improving your knowledge and learning, and deepening your understanding of the world” (A37).

When taken together, Pichai presents a rationale that is built upon the profound mindset that any information or knowledge is available to humans *and/or* machines. I call this mindset *information-knowledge* and it is an important foundation to Pichai’s VV of global AI futures. What is a core issue to this mindset is its failure to acknowledge that even an AI considering everything *available* thereto will still only consider a fraction of what may be relevant to the issue at hand – availability cannot be equal to completeness. Subscribing to information-knowledge means denying endless, even inaccessible, sources of information and knowledge. Thus, Pichai’s impossible vision of an AI processing “infinite context” (A47) is a forlorn path towards innovation and knowledge generation that is recursive, restricted to the repeated reprocessing of inherently limited data sets.

SVs supposedly ‘create and ride waves of change’ (Hilgartner 2015, 34), which is a metaphor that Pichai also employs himself. Concerning the future of AI, “let’s look at how well we’re positioned for the next wave of AI innovation, and the opportunity ahead” (A46), elsewhere discussing a “next wave of technology” (A40). However, we might ask: how does information-knowledge as a mindset translate to Google’s sociomaterial practices? What kinds of waves might we expect? I want to start with my assumption that information or knowledge are considerably more versatile products to use than cars or food are.³ Hence, claiming that “[a]n information company, we take our responsibility seriously to provide reliable, trustworthy information to people when they need it” (A22), is far from trivial. Pichai writes elsewhere that “YouTube dared to ask: What if we gave everyone a way to share what they know with the world? And today, it’s become a powerful platform for learning and knowledge” (A40). Now, while the latter may be true, it also obscures the many questions we might pose – without necessarily implying that we live in either a post-truth or post-factual age – about *what* is learned and *who* is applying *what* knowledge for *what ends* with *what effect*. Only the additional material reveals this issue, at least implicitly, as it describes one risk of AI in that it “[c]reates or worsens information hazards (e.g., lack of groundedness, non-factuality, misinformation)” (A32a). Yet, instead of acknowledging known issues, rather simplistic ideas are far more prevalent, as Pichai imagines that “our products are helping people access knowledge and opportunity” (A30) or that Google is “enabling developers and businesses to build their own transformative products and services” (A37).

3 STS has devoted a great deal of works to the messy processes that revolve around the production and use of technology (Bijker and Law 1992; Akrich 1992). My claim here is only that if you are looking at, say, AI chatbots through lenses like *in- and descriptions* (Akrich and Latour 1992, 259f.), then there will be more space for variability of use and impact than would be the case with, say, a door-closer or seat belts (Latour 1992).

The aforementioned quotes also hint at Pichai's ideas about the *kinds* of innovation to which the large-scale processing of information or knowledge may lead. For example, with advanced AIs, Pichai suggests, "a gaming company could provide a video analysis of a player's performance, along with tips to improve. Or an insurance company could combine video, images and text inputs to create an incident report, making the claims process easier" (A44). Likewise, he suggests that:

"You could ask a deep research agent, 'Where in Europe should I vacation for two weeks in August?' Five minutes later, you have a full analysis considering factors like affordability, weather, visa requirements, and more—all with sources cited" (A53).

All three examples – the gaming company, the insurance, and the deep research travel agent – describe the optimization of existing practices, rather than the invention of new ones, as the implied change largely consists of the mere integration of (Google's) technologies – especially AI – into already existing and well-known practices. Further exemplifying this, Pichai explains that "we're leaning into the living room experience with multiview, and a new option for creators to organize content into episodes and seasons, similar to traditional TV" (A51). Here, the goal is once again merely to shape current practices so that Google benefits, rather than actually coming up with 'new options' for private entertainment. Ultimately, the picture of the future that Pichai paints depicts a world in which – put somewhat polemically – people mostly do what they have always done. Things may take a little less time than previously, but the main 'transformation' can be observed in the implied integration of Google's products and services into increasingly more aspects of both companies' and people's activities.

I want to stress that this is fair practice, but also that what it stands in stark contrast to is the way in which it is talked about. With claims like "[w]e've known for a while that AI will be the next technology to transform companies" (A44), we can see how AI is continuously framed in exceptional terms: "I remember watching in awe as the Research team showed us the progress they'd made with image recognition, driven by breakthroughs in neural networks. It was the first moment I thought to myself: this is really going to change everything!" (A40). Hence, Pichai has labelled Google an 'AI-first company' since 2016 and with increasing frequency in the aftermath of ChatGPT's publication (A36, A37, A39, A40, A46, A47, A53). To his mind, the incoming 'wave,' which also urged Pichai to introduce Google's *Gemini Era* (A43, A47, A52), will leave nothing untouched: "I've been reflecting on the big technology shifts that we've all been a part of. The shift with AI is as big as they come and that's why it's so important that we make AI helpful for everyone" (A53). Pichai is keen to let others know that "AI will be the biggest technological shift we see in our lifetimes" (A40).

The ‘wave,’ following Pichai’s view, is coming in a fast, unpredictable and more-or-less inexorable manner; there are 46 mentions of one or more ‘breakthroughs’ spread throughout 21 contributions, and he acknowledges that risks may be inherent: “Every generation worries that the new technology will change the lives of the next generation for the worse” (A53). However, continuing the same quote, he addresses these worries in an interesting way: “[...] yet, it’s almost always the opposite. I grew up doing math using logarithmic tables, and I was uncomfortable watching my kids learn math with smartphones. They’ve turned out just fine” (A53). Again, and despite him building up expectations of fundamental change and the singularity of AI, he turns to fiercely mundane (and arguably simplistic) stories to assuage the critics even when addressing sincere criticism and worry.

Public service or Google’s business?

In this short section, I will take a closer look at how Pichai depicts Google’s relationship with nation states, including state confederations like the EU. Speaking to various leaders at the *2025 AI Action Summit* in Paris (see *AI Action Summit 2025*), Pichai remarked:

“As [AI] continues to improve, it will spur innovation, opportunity and growth in economies around the world, and drive an explosion in knowledge, learning, creativity, and productivity that will shape the future in exciting ways. The opportunity with AI is as big as it gets. And it will be up to the people in this room to make sure that as many people as possible benefit” (A53).

Touching on various topics discussed previously, Pichai positions Google as leading the charge in an imminent ‘explosion’ of benefits. At the same time, he constructs the size and quality of this ‘explosion’ as dependent, too, on “the help of the member countries and leaders in this room [to be] creating an enabling policy environment” (A49). Pichai points out how public policy will play an ‘important role’ (A53) in the satisfactory dissemination of AI and strongly urges nations to foster an environment that allows Google to thrive: “Europe’s productivity is dependent on using these emerging technologies; and European competitiveness depends on productivity. So driving adoption is key, so that the productivity gains happen at scale and across the economy” (A53).⁴

This material reveals an implicit tension between states and corporations as competing loci of societal organization and governance. Against the backdrop of the analysis so far, Pichai’s rhetoric – e.g., when he claims that “Google invests in

4 The speech that this contribution is based on took place in Paris, which is why Pichai mentions ‘Europe’ here, but this could well be taken as a proxy for every other region in the world.

Africa" (A16, A20) – reflects a broader narrative that reconfigures private financial and commercially driven investment, not as primarily economic activity, but as inherently developmental and emancipatory intervention. Google's own consequential benefits are – just like the risks posed by AI – usually confined to the background, surfacing only during earnings calls (A3, A44, A51, A52) and at Google's annual IO-conferences (A12, A24, A37, A47). What is key to this is how Pichai equates Google's aspirations with those of nation states, evoking collective benefits like a shared "golden age of innovation" (A53), "growing the economic pie" (A35), or achieving global sustainability. For Pichai, Google and nation states (should) act almost, if not fully, in alignment; this once again portrays Google as a selfless giant:

"As we make these investments, we know we can't do this alone. We look forward to partnering with African governments, policymakers, educators, entrepreneurs and businesses. We have so much opportunity ahead as Africans shape the next wave of innovation. Thank you for the chance to be a part of it" (A17).

However, considering Google's scale and infrastructural embeddedness, it should not be ignored that, at the end of the day, corporations need to prioritize their own economic growth over general societal equilibria – not the other way around.

In some senses, Pichai also suggests that nation states are generally not faring as well as they should in pursuing those allegedly common goals. Fittingly, his tone of voice appears disappointed, rather than disdainful. Speaking at the *AI Action Summit*, once again, he proclaims that:

"I think when history looks back it will see this as the beginning of a golden age of innovation. But these outcomes are not guaranteed. The biggest risk could be missing out. [...] We must not let our own bias for the present get in the way of the future. We have a once-in-a-generation opportunity to improve lives at the scale of AI. Let's do everything we can to make it possible" (A53).

Thus, he later states that useful public policy "[a]ddresses risks, without stymying innovation, progress and the positive impacts" (A53). To him, this is why "governments need to take a thoughtful, strategic approach to AI to drive investment in infrastructure, people, and adoption, including by governments themselves [in this] important and historic moment" (A53).

Pichai's ideas of state-private relationships also include normalizing Google's ability to assume tasks that were traditionally reserved for either national governments or the international community. In addition to the aforementioned global developmental work, this also includes efforts concerning COVID-19 vaccinations (A9, A14), managing unemployment (A3), or supporting food banks (A29). Pichai makes Google's will to 'help' nation states clear, explaining how "[i]n the public sector, we are

helping governments deliver critical health and social services.” (A3). What is perhaps most striking is one contribution, self-explanatory titled “Building a private sector response to the global refugee crisis” (A27). It opens with a snapshot showing Pichai and a small number of people gathered around a whiteboard, brainstorming the topic at hand. Three keywords have been written on the whiteboard: ‘Challenges,’ ‘Needs,’ and ‘Support,’ while one subitem, ‘Challenges,’ also includes ‘Marketing/Business Development.’ This particular contribution may simply be read as a political statement that is directed at governmental institutions and their deficient management of current refugee crises. However, towards its end, Pichai also explains that part of the ‘response’ is an assumed:

“responsibility to ensure people everywhere can benefit from the opportunities technology creates, be it creating the infrastructure that widens access, advancing technologies that can enable progress, or making sure the internet remains free, open and safe—for everyone” (A27).

The self-serving aspects that fundamentally inform Google’s activities still shine through the more prominent narratives of goodness and generosity, even in the context of global refugee crises, and involves assuming responsibilities traditionally reserved for governments and adopting the role of a prophetic corporation (Haupt 2021).

Groundbreaking (?) tech: conclusions

“A message from our CEO” is a platform through which to distribute VVs about global AI futures and presents a very particular set of ideas about the world in which we live, how it works, how it can and should be shaped, and the role that AI will play in that process. Pichai portrays AI not as an occasionally convenient or fun tool for people to use (or not use), but as a technological necessity for general human progress and wellbeing as such. Grounding it in both Google’s and his own personal history (think of the rotary phone), he combines strong moral self-legitimization (think of *tech that helps*), the idea that information access is key to desirable social activity (think of *infinite context*), and the notion that Google can provide people with all necessary knowledge (think *information-knowledge*). As a result, Pichai’s vanguard vision of global AI futures introduce a Google that is no longer merely a *part* of global societies, but that

has become *foundational* and *indispensable* thereto,⁵ blurring the line between corporate responsibilities and market expansion in peculiar ways. With a self-image that many other companies simply cannot emulate, and the sheer scale and public impact of its technology, this chapter calls for further evaluations of corporate power in contemporary global political economies. In part, this is because analysis suggests that the brave new world Pichai envisions is surprisingly similar to the world in which we currently live. How is this so?

Now, any AI can provide an output only based on its input; that is, on its database and its prompts. However, digital databases are inherently limited; the sum of every information *available* to it will never be all of the information *in existence* – even if only due to things, events, or meanings being forgotten over time, all while remaining tacitly impactful. ‘Infinite context’ will remain a theoretical construct but Pichai disregards this informational deadlock. The information-knowledge mindset allows him to suggest that most, perhaps any, information or knowledge is potentially accessible and comprehensible by machines/AI.

This mindset renders most of Pichai’s narratives about innovation or transformation essentially hollow, though, caught up in a peculiar recursive logic: if *everything*, including any human activity, is merely a source for data (Zuboff 2019, 2015), and if, simultaneously, AI becomes foundational to most societal processes, then everything will turn out to have been both founded on and fueled *by itself*. Any resulting innovation is, thus, necessarily mimetic, rather than transformative. In other words, re-organizing an inherently reductive database over and over again will not result in an entity that is capable of producing meaningful innovation and actual *novelty*, most notably in domains in which data is notoriously incomplete, contextual, or tacit. This is why AI is undeniably able to recombine enzymes for drugs or to produce useful computer code, but struggles in unpredictable, ambiguous, social processes in which an exhaustive information base is fundamentally impossible.

It is not surprising that most of Pichai’s examples for AI applications are restricted to superficial change, instead of aspiring to either thinking of doing fundamentally novel things. AI is essentially presented as a tool for people to keep doing the things that they have always done, but now with the involvement of AI. While this may be a functional strategy for an ‘information company’ to flourish, it undermines meaningful social transformation in the way that Pichai’s prophetic language (Haupt 2021) repeatedly implies. Summarizing it poignantly: Realizing Google’s vanguard visions of global AI futures means avoiding profound structural change, while also believing that we are living through it.

5 In this sense, after successfully expanding from being a mere company’s name to also being a globally recognized activity, *Google* may well eventually become an adjective as well, something associated with everything prosperous, efficient, and morally guided simply by being something related to *google*.

To end on a slightly polemical note, Pichai is also sure that this chapter and everything concerned with AI will soon be material for the archives, given that AI has (allegedly) already found its technological successor: “Quantum computing [is] the next big paradigm shift in computing, following AI. And we’re making good progress. Our latest breakthrough was in December [of 2024]” (A51). So, will quantum finally change *everything*? Anticlimactically, Pichai’s hopes would already be fulfilled if quantum is “used to identify molecules for new medicines, create fertilizer using less energy, [or] design more efficient sustainable technologies from batteries to nuclear fusion reactors” (A34). We should perhaps more commonly ask if the visions and imaginaries that regularly gain traction in contemporary societies may indeed have something to do with these very societies’ vague feeling of somehow being stuck at/in the moment, even with Pichai’s hopes also including quantum computing’s ability to produce “physics research that will lead to advances we can’t yet imagine” (A34). We should keep asking *whose* visions we must follow and put into practice, inside and outside academia,⁶ *how* so, and, perhaps, most importantly, *why*, regardless of whether what we are examining concerns AI, quantum computing, or what have you.

References

- AI Action Summit (2025) *Presentation*. Available at: <https://www.elysee.fr/en/somm-et-pour-l-action-sur-l-ia/presentation> (Accessed July 30, 2025).
- Akrich, Madeleine (1992) The De-description of Technical Objects. In Bijker, Wiebe E. and Law, John (eds.) *Shaping Technology/Building Society: Studies in Sociotechnical Change*. Inside Technology series. Cambridge, MA and London: MIT Press, pp. 205–224.
- Akrich, Madeleine and Latour, Bruno (1992) A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies. In Bijker, Wiebe E. and Law, John (eds.) *Shaping Technology/Building Society: Studies in Sociotechnical Change*. Inside Technology series. Cambridge, MA and London: MIT Press, pp. 259–264.
- Alphabet (2025) *Alphabet Announces Fourth Quarter and Fiscal Year 2024 Results*. Available at: <https://abc.xyz/assets/a3/91/6d1950c148fa84c7d699abe05284/2024q4-alphabet-earnings-release.pdf> (Accessed July 30, 2025).
- Bartl, Gabriel (2023) Krise und technologischer Solutionismus: Die politische Dimension des digitalisierten Umgangs mit Unsicherheit. In Wagener, Andreas

6 For example, see the work by Pares Dave and Arielle Pardes (2025) for WIRED magazine on Google’s great challenges in the AI-‘frenzy’ that are not apparent in “A message from our CEO.”

- and Stark, Carsten (eds.) *Die Digitalisierung des Politischen: Theoretische und praktische Herausforderungen für die Demokratie*. Wiesbaden: Springer VS, pp. 45–62.
- Berliner, Daniel and Prakash, Aseem (2015) "Bluewashing" the Firm? Voluntary Regulations, Program Design, and Member Compliance with the United Nations Global Compact, *Policy Studies Journal*, 43(1), pp. 115–138.
- Bijker, Wiebe E. and Law, John (eds.) (1992) *Shaping Technology/Building Society: Studies in Sociotechnical Change*. Inside Technology series. Cambridge, MA and London: MIT Press.
- Google (2025a) *The Keyword*. Available at: <https://blog.google> (Accessed July 30, 2025).
- Google (2025b) *A Message from our CEO*. Available at: <https://blog.google/inside-google/message-ceo> (Accessed July 30, 2025).
- Google (2025c) *Our Approach – How Google Search Works*. Available at: https://www.google.com/intl/en_us/search/howsearchworks/our-approach/ (Accessed July 30, 2025).
- Haupt, Joachim (2021) Facebook futures: Mark Zuckerberg's discursive construction of a better world, *New Media & Society*, 23(2), pp. 237–257.
- Hilgartner, Stephen (2015) Capturing the imaginary: Vanguards, visions and the synthetic biology revolution. In Miller, Clark A., Hilgartner, Stephen, and Hagedijk, Rob (eds.) *Science and Democracy: Making knowledge and making power in the biosciences and beyond*. Genetics and Society series. New York and London: Routledge, pp. 33–55.
- Huberman, Jenny (2022) *The Spirit of Digital Capitalism*. Cambridge and Hoboken: polity.
- Jasanoff, Sheila (2004a) The idiom of co-production. In Jasanoff, Sheila (ed.) *States of Knowledge: The Co-Production of Science and the Social Order*. London and New York: Routledge, pp. 1–12.
- Jasanoff, Sheila (ed.) (2004b) *States of Knowledge: The Co-Production of Science and the Social Order*. International Library of Sociology series. London and New York: Routledge.
- Jasanoff, Sheila and Kim, Sang-Hyun (2009) Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea, *Minerva*, 47(2), pp. 119–146.
- Jasanoff, Sheila and Kim, Sang-Hyun (eds.) (2015) *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. Chicago, IL and London: University of Chicago Press.
- Kohl, Uta (ed.) (2017) *The Net And The Nation State: Multidisciplinary Perspectives On Internet Governance*. Cambridge, New York, Melbourne, Delhi, and Singapur: Cambridge University Press.
- Latour, Bruno (1992) Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts. In Bijker, Wiebe E. and Law, John (eds.) *Shaping Technology/*

- Building Society: Studies in Sociotechnical Change*. Inside Technology series. Cambridge, MA and London: MIT Press, pp. 225–258.
- Latour, Bruno (2004) Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern, *Critical Inquiry*, 30, pp. 225–248.
- Lindgren, Simon (ed.) (2023) *Handbook of Critical Studies of Artificial Intelligence*. Cheltenham and Northampton, MA: Edward Elgar Publishing.
- Mager, Astrid (2017) Search engine imaginary: Visions and values in the co-production of search technology and Europe, *Social Studies of Science*, 47(2), pp. 240–262.
- Mager, Astrid, Norocel, Ov Cristian, and Rogers, Richard (2023) Advancing search engine studies: The evolution of Google critique and intervention, *Big Data & Society*, 10(2), pp. 1–8.
- Manyika, James, Dean, Jeff, Hassabis, Demis, Croak, Marian, and Pichai, Sundar (2023) *Why AI: Why we focus on AI (and to what end)*. Available at: <https://ai.google/advancing-ai/why-ai/> (Accessed February 28, 2025).
- McNeil, Maureen, Arribas-Ayllon, Michael, Haran, Joan, Mackenzie, Adrian, and Tutton, Richard (2017) Conceptualizing Imaginaries of Science, Technology, and Society. In Felt, Ulrike, Fouché, Rayvon, Miller, Clark A. and Smith-Doerr, Laurel (eds.) *The Handbook of Science and Technology Studies*. Cambridge, MA and London: MIT Press, pp. 435–463.
- Morozov, Evgeny (2013) *To save everything, click here: The folly of technological solutionism*. New York: PublicAffairs.
- Nachtwey, Oliver and Seidl, Timo (2024) The Solutionist Ethic and the Spirit of Digital Capitalism, *Theory, Culture & Society*, 4(2), pp. 91–112.
- Paresh, Dave and Pardes, Arielle (2025) *Inside Google's Two-Year Frenzy to Catch Up With OpenAI*. Available at: <https://www.wired.com/story/google-openai-gemini-chatgpt-artificial-intelligence> (Accessed May 4, 2025).
- Pichai, Sundar (2018) *AI at Google: our principles*. Available at: <https://blog.google/technology/ai/ai-principles> (Accessed 28 February 2025).
- Rosa, Hartmut (2003) Social Acceleration: Ethical and Political Consequences of a Desynchronized High-Speed Society, *Constellations*, 10(1), pp. 3–33.
- Schroeder, Ralph (2014) Does Google shape what we know?, *Prometheus*, 32(2), pp. 145–160.
- Smith, Merritt Roe and Marx, Leo (eds.) (1994) *Does Technology Drive History? The Dilemma of Technological Determinism*. Cambridge, MA and London: MIT Press.
- Srnicek, Nick (2017) *Platform Capitalism*. Theory Redux series. Cambridge and Malden, MA: polity.
- Sveiby, Karl-Erik, Gripenberg, Pernilla, and Segercrantz, Beata (eds.) (2012a) *Challenging the Innovation Paradigm*. Routledge Studies in Technology, Work and Organizations series. New York and London: Routledge.
- Sveiby, Karl-Erik, Gripenberg, Pernilla, and Segercrantz, Beata (2012b) Challenging the Innovation Paradigm: The Prevailing Pro-Innovation Bias. In Sveiby, Karl-

- Erik, Gripenberg, Pernilla, and Segercrantz, Beata (eds.) *Challenging the Innovation Paradigm*. Routledge Studies in Technology, Work and Organizations series. New York and London: Routledge, pp. 1–12.
- Taylor, Charles (2002) Modern Social Imaginaries, *Public Culture*, 14(1), pp. 9–124.
- Verschraegen, Gert, Vandermoere, Frédéric, Braeckmans, Luc, and Segaert, Barbara (eds.) (2017) *Imagined Futures in Science, Technology and Society*, Routledge Studies in Science, Technology and Society. London and New York: Routledge.
- Wucherer, Sebastian (2025) *Overview of all Articles included*. Available at: <https://docs.google.com/spreadsheets/d/12pNqZ38DVIlhRGfsOrHckk4NRUlx2WLwNckJr9b1I/edit?usp=sharing> (Accessed July 30, 2025).
- Wyatt, Sally (2008) Technological Determinism Is Dead; Long Live Technological Determinism. In Hackett, Edward J., Amsterdamska, Olga, Lynch, Michael, and Wajcman, Judy (eds.) *The Handbook of Science and Technology Studies*. Cambridge, MA and London: MIT Press, pp. 165–180.
- Zuboff, Shoshana (2015) Big other: Surveillance Capitalism and the Prospects of an Information Civilization, *Journal of Information Technology*, 30(1), pp. 75–89.
- Zuboff, Shoshana (2019) *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: Public Affairs | Hachette Book Group.

