

Summary (Long)

Gerd Leonhard's keynote examines how artificial intelligence and other fast-moving technologies are reshaping human life, work, and society. Its central argument is that the challenge is not simply to develop more powerful technology, but to decide what it is for and how to keep it aligned with human values. Leonhard warns that AI could help address major problems, yet unchecked competition for profit and dominance could erode human agency, employment, and democratic control.

A pivotal moment for humanity

Leonhard opens by distinguishing human thought from machine computation: people think through embodied experience, while technology does not yet have a body. He describes the present as “a fork in the road” where decisions about AI, climate, quantum computing, synthetic biology, and genetic engineering will shape a remarkable but uncertain future.

Recalling his 2016 book, *The Coming Clash of Humans and Machines*, he argues that the clash has become tangible. He cites public debate about whether AI could threaten humanity and questions the idea that severe harms might be acceptable in exchange for technological progress. He also raises concerns about transhumanism, including brain–internet connections and technologies that could enhance human abilities, asking how far society should go.

Leonhard points to a progression in AI development, from chatbots and reasoning systems to agents, innovators, and eventually organizations. He worries that this vision could shift from augmenting people to replacing them, a direction he attributes to leading AI labs.

AI as a powerful tool, and the need for judgment

Leonhard is not opposed to AI. He uses it in his own work, including to dub videos into multiple languages, and calls it a “power tool”. But, as with a nail gun, greater capability also brings greater risk; a tool that makes work faster must be used carefully and appropriately.

For him, the central missing ingredient is *telos*: purpose, wisdom, and the ability to collaborate. He argues that society may have the technology without the shared judgment to use it well. In particular, AI's promise of effortless output could weaken the value of practice, expertise, imagination, and learning. “The biggest pitch about AI is that we don't have to have effort,” he says, warning that convenience may come at the cost of skills and independent thought.

The Intelligence Revolution and human capabilities

Leonhard contrasts the roughly 300-year Industrial Revolution with an Intelligence Revolution unfolding in about a decade. Machines are moving beyond routine automation toward handling facts and logic, with effects across fields such as the military, healthcare, and pharmaceuticals.

That shift may force people to reconsider what education and professional expertise are for. Leonhard suggests that knowledge alone may no longer distinguish a person from a machine; human qualities will matter more. He also warns that, unlike earlier technologies such as the internet or mobile phones, AI can influence how people think. Repeatedly asking AI for personal decisions, he argues, risks outsourcing judgment and changing users' thinking habits.

At the same time, AI is only one of several major developments. Leonhard lists nuclear fusion and quantum computing alongside other emerging technologies, arguing that such advances could help address practical challenges in water, food, medicine, health, and transportation. He predicts that fusion could provide abundant clean energy in roughly 10 to 15 years, while stressing that the benefits depend on how people choose to use it.

Choosing a beneficial future

Drawing on Wired founder Kevin Kelly's optimism, Leonhard says hope should come not from having fewer problems, but from having greater capacity to solve them. He frames the question as whether societies will use their inventions for broadly shared good. In his simple formulation, good means "not dying" and "having rights".

Yet he describes a growing sense of pessimism, citing a claim that 72% of Europeans aged 25 to 35 say they do not expect to have children because they view the future as too bleak. He connects that anxiety to war, climate change, and AI.

Leonhard argues that incentives shape outcomes. If AI development primarily rewards money, growth, and power, he warns, it could drive an arms race and concentrate control. As an alternative, he proposes a sustainable economic model organized around five principles: people, planet, purpose, peace, and prosperity. The aim would be to reward beneficial outcomes rather than growth and dominance alone.

Investment, jobs, and the risks of unchecked deployment

Leonhard describes a major imbalance in investment: he says 98% of funding goes toward machine intelligence and just 2% toward human intelligence, including education, arts, training, and public resources. He argues that societies must reclaim influence over the future rather than leave it entirely to technology companies.

To illustrate how a technology's effects can change over time, he compares AI to social media, which began as an appealing innovation and later became associated with harm. He also says technology cannot simply be rejected; the task is to shape its use. As evidence of current pressures, he cites a report that eight out of ten financial institutions were being asked to cut staff by 20% and use AI instead, and points to a San Francisco poster reading "Stop hiring humans".



He says public concern about job losses is widespread, though he describes fear as especially pronounced in the United States and Europe compared with India, Asia, and Africa. He adds that AI is learning routine work across occupations, from legal paperwork and fact-checking to financial advice and online shopping. As systems develop into agents that can

take actions such as shopping or obtaining documents, the potential shift extends beyond answering questions to performing tasks on people's behalf.

From assistants to agents, and the question of control

Leonhard distinguishes between AI assistants, AI agents, and systems that could become “masters.” Assistants help with tasks such as translation and summarization; agents can act independently on a user's behalf; more advanced systems could have far greater autonomy. His concern is not only employment, but who sets the goals and remains in control;.

He warns that competition for market dominance may take priority over safety. He argues that companies are not necessarily malicious, but may be moving too quickly to raise capital and build increasingly powerful systems. If general intelligence arrives, he says, it is unclear which jobs would remain secure, and more importantly, how such systems could be controlled.

Leonhard compares AI development to raising a child: systems are programmed and then may develop in ways their creators did not anticipate. Citing AI scientist Geoffrey Hinton, he says that developers set AI in motion, after which it “grows” and can do other things. In his view, this makes ethical standards and safeguards essential, especially as systems may be able to generate further AI systems.

Ethics, regulation, and the AI emergency

Leonhard argues that technology does not possess ethics on its own. He invokes the contrast between ancient human instincts, imperfect institutions, and powerful modern technology, and questions whether existing institutions are equipped for the task. He also expresses concern about “godlike technology,” including humanlike robots, and challenges the assumption that technological development should proceed without limits.

He calls for stronger rules, noting that AI is subject to fewer restrictions than something as ordinary as making and selling a sandwich. His “AI emergency” includes not only the possibility of systems going out of control, but also people ceasing to think creatively and waiting for AI to supply answers. He argues that societies should preserve AI's useful applications while developing safeguards and a positive direction for its use.

As reasons to take precautions seriously, Leonhard cites a claim that AI had identified a security flaw affecting 70% of PHP websites, and repeats former Google CEO Eric Schmidt's prediction that every business process could be run by AI within five years. He warns that safeguards are often introduced only after failures occur, and raises possible scenarios such as financial-market disruption, energy-grid failure, or defense failures caused by AI.

European agency and building alternatives

Turning to Europe, Leonhard argues that the region should cooperate more closely and build its own capacity rather than rely heavily on foreign technology providers. He describes the goal as taking back the future and calls for Europe to invest, unite, and pursue a more independent course. As an example of the stakes of technological dependence, he points to Elon Musk's ability to shut down Starlink for Ukraine and asks who should have authority over infrastructure with such consequences.

He proposes a pan-European stock market focused on sustainable investment, which he calls “SUSDAC,” and echoes the “Build or Surrender” argument attributed to Mistral CEO Arthur Mensch: Europe needs to develop its own technology;. He also suggests an international agency for AI, comparable to the Atomic Energy Agency, and says Poland could be a suitable location.

Leonhard distinguishes a potentially beneficial future of assistive AI from a more dangerous one involving autonomous intelligence that acts for itself. He argues that protecting humanity requires both restraint and innovation: societies need

alternatives that can compete without surrendering control.

Personal and public choices

Leonhard stresses that investment and consumer choices influence which kind of AI gets built. He urges people not to fund or buy into companies if doing so supports a future that could take away human choices. He frames AI as a technology that can be directed toward very different outcomes, from medical advances to interventions in human reproduction.

His central recommendation is to invest in humanity as seriously as in technology. He names education, the arts, music, understanding, and public media as essential areas of investment, adding: "The wolf you feed is the wolf that wins."

At an individual level, he warns against using AI in ways that make people passive or encourage them to treat it as a person. He suggests resisting the impulse to outsource thinking, whether by delaying AI use or choosing not to rely on it for every answer. Governments and communities, he adds, must strengthen shared purpose, public media, and people's capacity for independent thought.

Conclusion

Leonhard's keynote presents AI as both a major opportunity and a serious governance challenge. Its benefits, from productivity to possible advances in energy and healthcare, are not automatic; they depend on human choices, ethical safeguards, economic incentives, and public investment. His main conclusions are to keep AI in the role of a tool rather than a master, invest in human capabilities alongside technology, build stronger institutions and rules, and pursue a more cooperative and technologically capable Europe. He closes by returning to the five principles of people, planet, peace, purpose, and prosperity, arguing that the future will be determined by the choices made now.