# Hassabis warns AI wave could dwarf Industrial Revolution — UK urged to pair ambition with safeguards



When Demis Hassabis, co-founder and chief executive of DeepMind, tells a national newspaper that artificial intelligence “could be 10 times bigger than the Industrial Revolution — and maybe 10 times faster,” it signals both the scale of change he expects and the urgency of preparation. Speaking to The Guardian, Hassabis said artificial general intelligence could arrive within five to ten years, offering “radical abundance” but also the risk of rapid social dislocation.

The warning comes amid visible advances. DeepMind’s AlphaFold system for predicting protein structures has been credited with accelerating scientific discovery, releasing models for hundreds of millions of proteins for open use in drug discovery, sustainability and disease research. According to the company, predictions that once took months or years can now be made in seconds. That kind of leap explains why many business and academic leaders now describe disruption in terms of years, not decades.

Optimism about AI’s potential is tempered by projections of economic strain. Investment-bank analysis cited by the BBC suggests generative AI could affect the equivalent of 300 million full-time jobs worldwide, with administrative, legal and clerical roles among the most exposed — even as the same report forecasts significant productivity and GDP gains if change is well managed. UK ministers have signalled a preference for adoption that complements, rather than replaces, human work.

Industry leaders echo that duality. Former OpenAI chief technology officer Mira Murati told WIRED that progress is likely to continue rapidly, stressing the need for interdisciplinary input, safety engineering and regulation so benefits are broadly shared. “The technology is not intrinsically good or bad,” she said, adding that society must “collectively keep steering the models toward good.”

The pace is tangible. Reuters has reported that OpenAI’s GPT-5 is nearing release, with early testers noting gains in coding, reasoning and problem-solving. But scaling, safety evaluation and energy demands remain major considerations, with economic effects on cloud infrastructure, electricity grids and public policy.

Legal and ethical pressures are also rising. Copyright and data-use lawsuits from publishers, artists and authors are challenging model-training practices, with courts beginning to set precedents that will influence licensing strategies. Reuters’ coverage suggests this will force companies to rethink data provenance and commercial models, potentially slowing parts of the race while improving accountability.

For the UK — and any jurisdiction seeking to shape the transition — the opportunity is to pair ambition with institution-building. Government has promoted AI investment for productivity gains while emphasising complementarity with work. A practical strategy could include national reskilling programmes for workers most exposed to automation; clear licensing and data-use frameworks to reduce legal uncertainty; and incentives for open science and shared infrastructure, following AlphaFold’s model, to direct AI power toward public-good applications.

The industry itself is calling for coordinated regulation and safety guardrails to manage risks from misinformation to energy bottlenecks. Hassabis has urged international cooperation to ensure that radical productivity gains do not lead to radical inequality.

The UK has strong research institutions, a biotech sector ready to apply tools like AlphaFold, a growing AI ecosystem and policymakers engaged in regulatory design. If these assets are marshalled through targeted investment, data and IP clarity, and inclusive rollouts, the UK could set a global example of responsible, high-impact AI innovation.

Time is short: the industry moves fast, and public policy must match that pace. But with the right mix of science, stewardship and social policy, AI’s transformational potential — from accelerating medical breakthroughs to boosting productivity — can be realised in ways that broaden opportunity rather than narrow it.

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## Bibliography

1. <https://ai2people.com/ai-is-moving-10x-faster-than-the-industrial-revolution-says-deepmind-chief-but-can-society-keep-up/> - Please view link - unable to able to access data
2. <https://www.theguardian.com/technology/2025/aug/04/demis-hassabis-ai-future-10-times-bigger-than-industrial-revolution-and-10-times-faster> - Demis Hassabis, DeepMind’s CEO, tells The Guardian that AI could be ten times bigger than the Industrial Revolution and possibly ten times faster, arguing that artificial general intelligence may arrive within five to ten years. He describes AI’s potential to deliver ‘radical abundance’, transform medicine and science, but warns of significant social disruption including mass job displacement, energy demands and misinformation. Hassabis calls for international cooperation, ‘smart’ regulation, and safety guardrails while expressing cautious optimism. The interview traces his career, highlights AlphaFold’s breakthroughs, and stresses the need to distribute AI’s benefits equitably to avoid exacerbating inequality and protect public interest.
3. <https://www.wired.com/story/big-interview-mira-murati-2024/> - Mira Murati, formerly OpenAI’s chief technology officer, discusses in WIRED her optimism about AI’s trajectory and the practical steps needed to ensure it benefits humanity. She frames progress as likely to continue, comparing model development to a maturation from earlier stages towards PhD-level task performance in specialised areas. Murati emphasises safety, regulation, and the importance of interdisciplinary input from social sciences and humanities to guide development. She explains her decision to leave OpenAI to found a new venture focused on human–AI collaboration and transparency, stressing that accessible, well-governed AI can unlock scientific and creative advances while requiring careful stewardship globally.
4. <https://www.bbc.com/news/technology-65102150> - Goldman Sachs’ research, reported by the BBC, estimated that generative AI could affect the equivalent of around 300 million full‑time jobs worldwide, potentially automating a substantial share of tasks in administrative, legal and white‑collar roles. The analysis suggested productivity gains and a possible global GDP uplift but warned of wage pressures and sectoral disruption. The report emphasised that outcomes would vary by industry, with lower impact in hands‑on trades. Economists cited by the BBC urged caution, noting uncertainty about job replacement versus augmentation and the need for policy responses to manage retraining, social safety nets and equitable distribution of gains.
5. <https://deepmind.google/blog/alphafold-reveals-the-structure-of-the-protein-universe> - DeepMind’s AlphaFold blog explains how AlphaFold predicted the three‑dimensional structures of proteins with unprecedented accuracy, transforming biology by reducing months or years of lab work to seconds. In partnership with the European Molecular Biology Laboratory‑EMBL‑EBI, DeepMind expanded the AlphaFold Protein Structure Database to include predicted structures for nearly every catalogued protein, releasing over 200 million models. The post details open‑sourcing of code, invitation to researchers to use the database for drug discovery, sustainability and disease research, and the potential for AlphaFold to accelerate scientific discovery globally while emphasising collaboration and accessibility. It underscores open science, data sharing and reproducibility efforts.
6. <https://www.reuters.com/business/retail-consumer/openais-long-awaited-gpt-5-model-nears-release-2025-08-06/> - Reuters reports that OpenAI’s GPT‑5 neared release after internal testing by early users, who praised improvements in coding, reasoning and problem‑solving though noting the leap from GPT‑4 appeared more incremental than prior generational jumps. The piece describes internal trials under non‑disclosure agreements, references training and scaling challenges, and notes OpenAI declined comment while preparing for imminent launch. It situates GPT‑5 within fierce industry competition and mentions Microsoft’s backing, while outlining implications for cloud infrastructure, energy use, and regulatory scrutiny as models grow in capability and are exposed to safety evaluations and early adopter feedback and broader societal impact debates emerge.
7. <https://www.reuters.com/legal/litigation/tech-companies-face-tough-ai-copyright-questions-2025-2024-12-27/> - Reuters summarises a wave of copyright and data‑use lawsuits against AI firms, noting claims from news publishers, authors, musicians and visual artists that companies trained models on copyrighted material without permission. Cases include suits by major media organisations and artists alleging infringement and seeking damages or injunctions. The report discusses legal questions over ‘fair use’, ongoing settlements and licences, and how early court rulings could set precedents shaping AI training practices. Reuters highlights that litigation, alongside regulatory efforts, is forcing companies to reassess data provenance, licensing strategies and risk management as governments and stakeholders demand clearer rules and accountability urgently.