OPPORTUNITY 41

SCOPE **WITHIN REACH**

UNCERTAINTIES

Technology, Values

MEGATRENDS

Future Humanity

TRENDS

Artificial Intelligence
Digital Communities
Future of Purpose & Work
Human–Machine
Transforming Education

SECTORS IMPACTED

Communication Technologies & Systems
Consumer Goods, Services & Retail
Cyber & Information Security
Data Science, AI & Machine Learning
Digital Goods & Services
Education
Financial Services & Investment
Government Services
Immersive Technologies
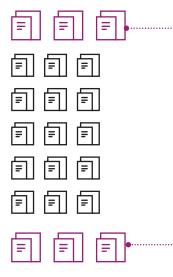Art, Media & Entertainment
Professional Services

What if we had a Turing declaration for human intelligence?

THE POST-TURING ERA

A declaration of original thought and the extent of human–machine intelligence ushers in a new era of innovation and creative thinking, encouraging greater accountability and integrity.

In less than three years, while GPT-3 performed in the bottom 10% across 30 academic/ professional exams,

GPT-4 scored in the top 10%

WHY IT MATTERS TODAY

The Generative Pre-trained Transformer 3 (GPT-3) language model was developed by OpenAI in 2020, since then, the progress has been rapid. With less than three years between the relaease of GPT-3 and GPT-4,[826] while GPT-3 performed in the bottom 10% across 30 academic/ professional exams, GPT-4 scored in the top 10%.[827] GPT-4 handles image and text inputs, processing 25,000 words compared with GPT-3.5's 4,000 and is both 40% more accurate than GPT-3[828] and up to 60% less likely to make things up than GPT-3.5.[829]

GPT-3 was used to train OpenAI's ChatGPT, a form of generative AI (GenAI), a type of algorithm that can produce content based on user prompts.[830] Launched in late 2022, ChatGPT gained over 1 million users in just five days, reaching more than 100 million users in late 2023.[831] Handling multiple modes for inputs and outputs, such large-language-model-based tools can now write poems or letters in seconds[832] and generate images[833] and are expected to generate video and audio content in the future.

GenAI will transform industries, from consumer-packaged goods, financial services, and healthcare services, to media, telecommunications,[834] and academia.[835] In the near term, GenAI could contribute $4.4 trillion in economic value, boosting productivity and industry growth. Some 80% of current AI research is focused on GenAI.[836]

A variety of challenges are emerging because of the difficulty of distinguishing human-content from machine-generated content. The rise of GenAI brings legal issues of copyright violation, ownership of AI-generated content, and the use of unlicenced content in training data.[837] GenAI can be used to clone human voices and create hyper-realistic images and videos, resulting in serious implications for misinformation.[838]

The Turing test – created by Alan Turing in 1950 – asserts that if a machine can engage in a conversation with a human without being detected as a machine, it has demonstrated human intelligence.[839] Recently, there have been claims that some AI tools, including Google's LaMDA (Language Model for Dialogue Applications)[840] and OpenAI's ChatGPT,[841] have passed the Turing test.

OPPORTUNITY

As technology increasingly blurs human and machine intelligence making the Turing test obsolete, a declaration – or formal statement or assurance – about the originality of thought and extent of human–machine intelligence promotes accountability and integrity[842] and indirectly ushers in a new era of innovation and creative thinking,

Although expanding the Turing test to encompass broader aspects such as content ownership, authorship, contextual understanding, and AI manipulation is important, the rapid pace of technological advances makes this approach extensively challenging.

BENEFITS

Human intelligence becomes more valuable, and education and research increasingly shift focus to critical thinking and community engagement. Humans make the best use of technology boosting productivity through transparency.

RISKS

People increasingly prefer machine-generated content, leaving original thinkers and content creators with limited impact and return. The human voice is lost among the machines.

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