How AI is Impacting Our Lives

BY TOMAS CHAMORRO-PREMUZIC

In an era marked by never-ending technological advancements, artificial intelligence has emerged as a transformative force that permeates every aspect of our lives, particularly business and work.

In July 2023, the McKinsey Global Institute estimated that AI has the potential to add $4.4 trillion per year to the world's economy. From streamlining everyday tasks to revolutionizing entire industries, AI's impact is both pervasive and profound. As I have illustrated in my latest book, *I, Human: AI, Automation, and the Quest to Reclaim What Makes Us Unique* (Harvard Business Review Press, 2023), the more we depend on technology, the more we come to value the human and humane aspects of life. AI and related technologies provide us with a great opportunity to rehumanize organizations and society, cultivating the skills, values, and behaviors that make us unique. But this result is not a given, and must not be taken for granted. Instead, realizing the massive challenges and realistic risks we face should hopefully translate into appropriate changes and initiatives to allow us humans to thrive in the AI age.

WHAT AI IS AND IS NOT

Everybody talks about AI, but few people care to define it. As Brian Christian puts it in *The Most Human: What Talking with Computers Teaches Us About What It Means to Be Alive* (Anchor, 2011), AI refers to the simulation of human intelligence in machines that are capable of learning, reasoning, and problem-solving, or producing any output that seems indistinguishable from human activity. These machine systems analyze vast amounts of data to identify patterns and make informed, data-driven, and automated decisions.

AI encompasses various subfields, such as machine learning, neural networks, and natural language processing, but as defined by Ajay Agrawal in *Prediction Machines: The Simple Economics of Artificial Intelligence* (Harvard Business Review Press, 2018), it is always at its core a prediction machine, in the sense of generating a stochastic forecast from a given input, prompt, or problem and delivering output based on that forecast.

It is also useful to distinguish between narrow AI, which is designed for specific tasks (e.g., the Waze satellite navigation app, the Google search engine, and the Amazon recommendation algorithm), and general AI, which exhibits human-like cognitive abilities across diverse domains. To this date, generative AI (explained in "Generative vs General Artificial Intelligence" in the blog Caminao's Way) is the closest example we have of a consumer-facing version of AI that displays many elements of generic or general AI, in the sense of being a versatile tool for solving a wide range of unrelated problems and creating a rather rich and heterogeneous array of tasks, including coding, poetry, image creation, knowledge retrieval, and text summarizing.

Examples of AI abound in our daily lives. Virtual assistants such as Siri and Google Assistant utilize natural language processing to understand and respond to user queries. Machine learning algorithms power recommendation systems on streaming platforms (e.g., Spotify, Netflix, YouTube, and Hulu) and social media platforms (e.g., Twitter, LinkedIn, and Facebook), suggesting content tailored to our individual preferences (e.g., interests, personality, and values). In the healthcare sector, AI improves the diagnosis of diseases from medical images with remarkable accuracy. Self-driving cars employ AI to navigate complex environments and make split-second decisions. Algorithmic trading platforms fueled by AI make investment decisions worth trillions of dollars, accounting for 60% to 75% of the overall trading volume in the U.S. equity market, European financial markets, and major Asian capital markets, according to the blog Quantified Strategies. And as detailed in the book I co-wrote with Franziska Leutner and Reece Akhtar, *The Future of Recruitment: Using the New Science of Talent Analytics to Get Your Hiring Right* (Emerald Publishing Limited, 2022), most large employers use some form of AI, such as resume-scraping tools, video interview platforms, or applicant tracking systems, to turn thousands of job applicants into a manageable shortlist of potential employees. These examples underscore AI's versatility and potential to transform industries, organizations, and the choices we and other people make about ourselves and others.

> " At least for now, we are far less likely to lose our jobs to AI than to another human using AI. And even when AI eliminates entire jobs, it tends to create many new jobs in turn, and at a faster rate. These jobs tend to require more human and new human skills, which is why talent shortages continue to intensify."

AI'S IMPACT IN FOUR AREAS

Work. AI's impact on the workplace is profound, reshaping industries and redefining job roles. Although media headlines and business forecasts about the automation and elimination of human jobs are often gloomy, if not apocalyptic, so far a different pattern has emerged, not just with AI but also previous disruptive technologies. More than destroying or automating jobs, AI automates tasks within jobs, changing the skills constellation needed to perform them. This is why reskilling and upskilling represent such an important business and leadership challenge for the next decade, according to the World Economic Forum in "Reskilling Revolution: Preparing 1 Billion People for Tomorrow's Economy."

At least for now, we are far less likely to lose our jobs to AI than to another human using AI. And even when AI eliminates entire jobs, it tends to create many new jobs in turn, and at a faster rate. These jobs tend to require more human and new human skills, which is why talent shortages continue to intensify, according to *Forbes* writer Kweilin Ellingrud in "Thinking Differently About Talent in a Tighter Labor Market" in August 2022. The number of job vacancies as of November 1, 2023, says the U.S. Bureau of Labor Statistics, continues to outpace the number of job seekers.

Importantly, automation driven by AI has streamlined repetitive tasks, allowing human workers to focus on higher-level, creative endeavors. A future in which our digital twins handle most of our emails, online meetings, and PowerPoint presentations, while the analogue or real version of us is freed up to think, relate, and create, is no doubt appealing. Likewise, manufacturing processes have become more efficient, leading to increased productivity and reduced errors as well as better sustainability, as argued in the article "Understanding the Adoption of Industry 4.0 Technologies in Improving Environmental Sustainability" in the journal *Sustainable Operations and Computers*.

And, while not yet realized, AI has the potential to boost meritocracy, diversity, and inclusion by sanitizing performance ratings and helping organizations quantify the real value humans provide at work, as I wrote with Ben Waber in the *Harvard Business Review* article "Toward Fairer Data-Driven Performance Management" (December 2022). Furthermore, since AI can help us look for talent in unusual, wider places and identify new indicators of human potential, it provides a clear opportunity for advancing fairness, equity, and inclusion, according to my February 2023 article in *Forbes*, "How Artificial Intelligence Can Boost Diversity and Inclusion."

Consumer behavior. AI has revolutionized the way businesses understand and cater to consumer preferences, with digital marketing embracing various forms of AI as a tool for developing a deeper relationship with clients and customers and allocating their budgets more efficiently. Psychological targeting has been quickly transformed from an obscure and questionable "Big Tech" tool—associated with surveillance capitalism—to a common everyday experience, representing the normative interaction between consumer and brands.

Recommendation algorithms on e-commerce platforms, which suggest products based on browsing and purchase history, represent the most common interaction between AI and humans, who happily outsource hundreds of daily decisions to machines. Personalized marketing campaigns leverage AI to target specific demographics, boosting engagement and sales, and recent advances in generative AI allow companies to produce synthetic brand and media content, as well as create original images, videos, and campaigns. Most notably, our ability to get what we want—and sometimes even what we need—wherever we are, delivered to us, faster than ever, is testimony to AI's predictive powers for improving delivery, manufacturing, and foundational supply-chain processes.

Health. In healthcare, AI's potential is evident in disease detection, drug discovery, and personalized treatment plans. Machine learning models analyze medical data to identify early signs of diseases such as cancer, improving diagnostic accuracy,

> " Machine learning models analyze medical data to identify early signs of diseases such as cancer, improving diagnostic accuracy, not to mention speed."

not to mention speed. AI-powered simulations expedite drug development by predicting molecular interactions, potentially accelerating the creation of life-saving medications. For example, AI played a critical role in accelerating the design and deployment of the recent COVID-19 vaccine, and even in the early phases of the digital revolution and "big data" age, AI showed its powers for linking granular population level patterns to disease onset and epidemics.

Life expectancy, which has more or less doubled since 1900, according to "Our World in Data," and continues to rise in most nations, will no doubt be boosted by AI applications to health, medicine, and pharma. Equally important, AI is acting as a "personal health coach" in millions of people's pockets through the hundreds of apps and wearables that monitor our sleep, exercise, and biophysiological markers and provide customized personal feedback to improve our health hygiene.

Relationships. AI has also found its way into our social lives, impacting how we interact with others. Social media platforms employ AI to curate news feeds and show content aligned with users' interests. In fact, according to studies published in *Online Social Networks: Human Cognitive Constraints in Facebook and Twitter Personal Graphs* (Elsevier, 2015), social media networks replicate real-life networks, as well as allow us to connect with strangers that likely share our interests, networks, and values.

Stanford News shared in August 2019 that online and mobile dating sites, which are powered by AI, represent the most common way for meeting our romantic, sexual, and long-term partners. In other words, AI is the biggest matchmaker in the world. Likewise, according to *Time* in "AI-Human Romances Are Flourishing—And This Is Just the Beginning," many people confess to developing human-like relationships with chatbots, robots, or generative AI, which, though perplexing and creepy to some, may be an important antidote to loneliness.

PSYCHOLOGICAL BENEFITS AND OPPORTUNITIES

Productivity and creativity. One of the most significant benefits of AI is its potential to enhance efficiency and productivity across various domains. Automated processes

and data analysis enable professionals to focus on tasks that require creativity, critical thinking, and strategic decision making. According to Lisa Feldman Barrett in *Seven and a Half Lessons About the Brain* (Mariner Books, 2020), our brain is not for thinking, but for making economic and efficient predictions about the world, which increase its familiarity and preserve mental and physical energy. Since humans are lazy by design, AI, like any other technology (e.g., electricity, the wheel, Zoom, and the microwave), is a tool for doing "less with more." As such, AI is expected to be a major driver of productivity, improving efficiencies and work-life balance and pushing humans to nurture more creative, intellectual, and spiritual aptitudes.

Data-driven decisions at work and beyond. AI's ability to analyze vast datasets enables data-driven decision making, enhancing the accuracy of choices in both professional and personal spheres. Businesses can optimize their operations by leveraging insights derived from AI-generated analyses.

In everyday life, AI-powered apps help users make informed decisions, whether it's choosing the best route for a commute or selecting a restaurant based on reviews. As I observe in my July 2023 *Fast Company* article, "A Psychologist Explains 5 Ways to Tell Someone Is Biased," since humans are biased by design, outsourcing decision making to machines, when trained with uncontaminated and sanitized data rather than data that reflects past human choices or subjective human preferences, can improve fairness at work and in society.

Improving meritocracy and DEIB. AI has the potential to promote meritocracy and diversity, equity, inclusion, and belonging (DEIB). By removing human biases from decision-making processes, AI systems can evaluate candidates based on skills and qualifications rather than demographic factors. This can lead to a more equitable distribution of opportunities and resources.

To fulfill this promise, AI needs to be ethical by design, with competent and moral humans playing an active role in selecting and decontaminating AI's training data and optimizing models for what "ought to be" rather than what "has been." For example, when companies have ditched problematic AI tools, such as

chatbots gone rogue or algorithms that broke bad because they recommended a surplus of middle-aged White male engineers for internal leadership roles, ditching the AI does not eliminate such cultural preferences. Importantly, "white box" algorithms can always be tweaked and edited to replace unfair and inaccurate signals with some that increase both effectiveness and fairness, but it mostly requires removing humans from the stages of judging or evaluating performance in others.

RISKS AND DANGERS

Malicious uses. While AI offers numerous benefits, it also presents risks when misused for malicious purposes. Cybercriminals can leverage AI to launch sophisticated attacks, such as deepfake-generated scams or AI-driven phishing attempts, though I argue in the May 3, 2023 issue of *Harvard Business Review* (in: "Human Error Drives Most Cyber Incidents. Could AI Help?") that AI can also help to deter cybercrime. But as *MIT Technology Review* pointed out in March 2021 ("How Facebook Got Addicted to Spreading Misinformation), the potential for AI to create convincing fake content raises concerns about misinformation and manipulation.

inequalities, exacerbating existing biases present in training data. Additionally, the ease of accessing AI-generated content might discourage genuine creativity and curiosity, and AI-fueled social media platforms are augmenting our narcissism and antisocial behaviors, such as excessive self-promotion, unrealistic entitlement, and materialistic aspirations that are not coupled with a strong work ethic.

HOW TO BE HUMAN IN THE AI AGE

As AI continues to shape our world, it's imperative to maintain a human-centric approach. Humanism 2.0, as we might call it, involves using AI to enhance human experiences while preserving essential human qualities. This approach acknowledges that technology is a tool to augment, not replace, human capabilities. To ensure that the AI age is truly the human-AI age, we must prioritize empathy, ethics, and compassion. Designing AI systems with transparency and fairness in mind can mitigate biases and promote equitable outcomes. Education plays a crucial role in preparing individuals for an AI-driven future, enabling them to understand the technology's capabilities and limitations.

> " **Humanism 2.0, as we might call it, involves using AI to enhance human experiences while preserving essential human qualities.** "
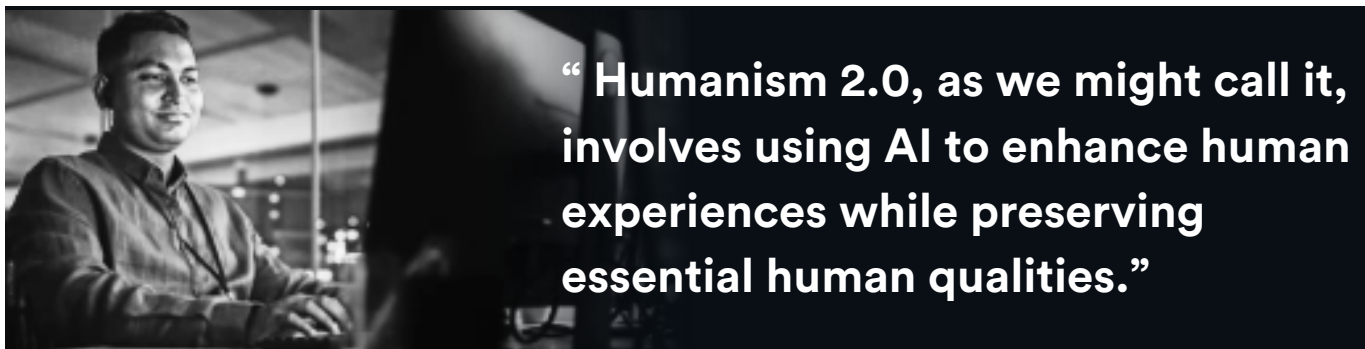
Ethical concerns. Ethical considerations surrounding AI include issues of privacy, accountability, and transparency. AI systems that collect and analyze personal data raise questions about user consent and data security. Moreover, the accountability for decisions made by autonomous AI systems becomes complex, particularly in cases where the outcomes have far-reaching consequences.

That said, it is helpful to refrain from having double standards, whereby perfection is expected from AI while we are perfectly happy with a dismal status quo. For example, one self-driving crash and people are horrified—but according to the World Health Organization as of June 2022, 1.3 million people die each year courtesy of avoidable human errors, and we are OK with it.

Amplifying dark side tendencies. AI's potential to amplify human tendencies, both positive and negative, is a significant concern. As I illustrate in *I, Human*, AI can reinforce impulsivity by offering instant gratification and validation through social media. Bias in AI algorithms can perpetuate societal

In the grand tapestry of our lives, AI has woven threads that touch virtually every domain. Its transformative power is evident in the workplace, consumer behavior, healthcare, and social interactions. While AI offers immense benefits in terms of efficiency, data-driven decisions, and greater equity, it also carries risks that demand careful consideration.

As we navigate the complexities of the AI age, embracing a human-centric approach is paramount. By using AI to amplify human potential and address societal challenges, we can shape a future where technology and humanity coexist harmoniously. The key lies in our ability to strike a balance between innovation and ethics, ensuring that the AI age is truly a testament to our shared human values. AQ

Tomas Chamorro-Premuzic is an organizational psychologist, author, and entrepreneur who works mostly in the areas of personality profiling, people analytics, talent identification, the interface between human and artificial intelligence, and leadership development.

This article was originally published in the MCE Quarterly!

MCE / KEY FACTS

MCE is your reliable partner for continuous success with agile people development solutions.

10,000,000

participants on AMA & MCE programmes in the last 10 years

92%

of Fortune 1,000 companies are our business partners

96%

of participants report they are using what they have learnt at AMA & MCE

1,000+

expert facilitators globally

100+

Open Training Programmes running throughout EMEA

98

year's experience working with our clients around the globe

For more information please contact:

+32 2 543 21 20   @ **info@mce.eu**

Visit mce.eu