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DIGITAL DARWINISM: THE SURVIVAL GAME OF AI AND ALGORITHMS

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No age or nation is ever free from threats, which can take various forms—natural, physical, nuclear, or even threats from humans and animals. Remarkably, the human mind is constantly innovating ways and means to confront these challenges. In an era of multiple intelligence, we are encountering threats that our ancestors could neither foresee nor experience. Sometimes, we learn to adapt and respond effectively, as seen during the COVID-19 pandemic. A world entirely devoid of threats, pain, injuries or destruction seems unimaginable. The Y2K crisis in 2000 momentarily shocked the world, highlighting our vulnerability. Yet, even the strategies we devise sometimes fail to yield the desired protection. It is within this context that we examine the survival game, where human-made machines increasingly influence human destiny.

We are currently experiencing what I would call the third phase of the Renaissance. The first phase, which began in the 15th and 16th centuries, marked a revival in science, art, literature, philosophy and religion, profoundly shaping human thought, beliefs and culture. This intellectual and scientific awakening was subsequently reinforced by the emergence of nanotechnology, particularly in the realm of scientific advancements, which pushed the boundaries of innovation. The second phase of this evolution unfolded with significant developments in psychology and environmental studies. Scholars developed a deep interest in exploring the complexities of the human mind, inspired by the works of Freud and other prominent psychologists. This period also witnessed a growing understanding of gender dynamics, fostering a greater awareness of equality and identity. Simultaneously, an increasing scientific focus on environmental preservation and the mysteries of ecosystems fueled a strong

commitment to protecting nature and sustaining life on Earth, thanks to the UN declarations on Sustainable Development Goals (SDGs). Now, we have entered the third phase—an era defined by rapid technological advancements, particularly the rise of Artificial Intelligence (AI), genetic algorithms and soft computing. These innovations are transforming nearly every aspect of our lives, from healthcare and finance to education and governance. However, this technological revolution also raises a critical question: Are we witnessing a new form of survival of the fittest, where adaptability to AI-driven change determines who thrives and who is left behind?

From the first phase of scientific and cultural progress, through the psycho-gender-ecological awakening, to the present automated technological revolution, the world is witnessing an unprecedented shift—one in which AI and algorithms dictate the pace of progress and redefine the very nature of human evolution. Originally introduced by the philosopher Herbert Spencer and later popularized by Charles Darwin, the theory of 'survival of the fittest' suggests that those best adapted to their environment will thrive, while others may struggle or disappear. 'Digital Darwinism' originally coined by Evan Schwartz thus refers to the phenomenon where businesses that fail to adapt new technology and changing customer habits ultimately face decline or extinction, akin to the process of natural selection. In the context of AI and algorithms, 'fitness' is no longer about biological traits but rather about adaptability, efficiency and competitive advantage in the digital landscape. This leads to a deeper inquiry: Is this technological trend a lasting evolution, or will it, like past innovations, eventually be assimilated into human life, losing its threatening force over time?

Who are the winners and losers in the age of Digital Darwinism? For centuries, human intelligence and creativity have driven innovation. Darwin's principle of natural selection applies just as much to the digital age as it does to biology. Companies like Amazon, Google and Tesla have leveraged AI to dominate, while those resistant to digital transformation—such as

Blockbuster, Kodak and countless other once-dominant brands — have faced a 'survival crisis'. The future does not belong to those who compete with AI but to those who collaborate with it. The key to survival is not only physical or mental strength but adaptability. As we know, algorithms, the backbone of AI systems, now filter what we see; it determines our job prospects and even predicts our consumer behaviour. They are also not neutral; but shaped by the data they are trained on, which can reflect and even amplify human biases. If left unchecked, these biases could entrench existing social and economic disparities, creating a world where the 'fittest' are not necessarily the most capable, but rather those who align with the biases of the algorithms.

All the articles in this issue of Journal of Dharma explore AI's transformative role across various fields, from music and education to psychology, dispute resolution and healthcare. While AI offers innovative solutions, ethical considerations and regulatory measures remain crucial for responsible implementation. Xiahong Qiao's article, "Redefining Creativity: The Effects of Artificial Intelligence on Human Musical Innovation," examines how AI reshapes music production, challenging traditional notions of authorship, ownership and copyright legitimacy. AI enables individuals to create music without formal training, raising legal and ethical concerns about intellectual property. Ramala Sarma's "Simulating Fear Responses in Evolutionary Computation (EC): A Fearism Approach to Adaptive AI Systems" applies the philosophical framework of fearism—developed by R. Michael Fisher and Desh Subba—to AI. By integrating evolutionary computation, this approach seeks to develop AI capable of adaptive, human-like responses to uncertainty. Peter O. O. Ottuh, Doris Udoka Uti and Margaret A. Efurhievwe's "The Ethico-Cultural Implications of Artificial Intelligence and Algorithm-Generated Music in Nigeria" assesses AI-generated music's impact on Nigeria's culture and music industry. Concerns include job losses, cultural homogenization and intellectual property rights erosion.

Davis Panadan and Sini John in their article "The Role of Artificial Intelligence and Dispute Resolution in Indian Villages" explores AI's potential to revolutionize Alternative Dispute Resolution (ADR). AI-powered platforms could enhance accessibility and efficiency in rural India, but regulatory oversight is necessary to ensure fairness and prevent algorithmic bias. Yiwen Guo's "The Ethical Dimensions of Artificial Intelligence in Education" presents AI as a tool to address global educational challenges. The study advocates for a balanced approach integrating human guidance with AI's capabilities, ensuring ethical and philosophical considerations in technology's role in education. Binoy Checkonthayil's "Artificial Intelligence and the Human Mind" investigates AI's influence on cognition, emotions and decision-making. While AI mimics cognitive functions, it lacks emotional intelligence and ethical reasoning, highlighting the need for responsible AI development that complements human intelligence. Jeong Eun Moon and Yong Jin Cho's "Automated Bone Age Estimation Using Artificial Intelligence - Boneage.Io®" evaluates an AI tool for estimating bone age in children. Analyzing 1,040 radiographs of Korean children, the study finds that Boneage.io® offers highly accurate, real-time assessments, significantly improving diagnosis and management of growth disorders.

As AI grows more sophisticated, ethical concerns loom large over biased algorithmic decisions, the potential for machines to surpass human intelligence and the impact of automation on employment. Furthermore, the widening digital divide between those with access to technology (digital haves) and those without (digital have-nots) threatens to deepen existing inequalities. Addressing these challenges requires a comprehensive strategy. Transparent and accountable AI development must be enforced through stringent regulations. Equally important is investing in education and reskilling to prepare the workforce for an AI-integrated future. Ethical guidelines should prioritize fairness, privacy and the collective good over narrow and self-serving interests. The evolving job market necessitates continuous

adaptation, requiring individuals to develop digital literacy and flexible skills to thrive in a digital economy. Thus, digital Darwinism is not an inevitability —it is a choice. It calls for restructuring our systems, policies and values. Companies must adopt ethical AI practices, designing systems that are transparent, inclusive and fair. In the face of digital Darwinism, the following question is of paramount importance. Will we allow technology to create a 'survival of the fittest syndrome', favoring only the privileged? Or will we collectively shape a future where AI's benefits are equitably distributed?

Digital Darwinism is, therefore, not about surrendering to technology but about mastering its transformative potential. Policymakers must strike a balance between technological advancement and social responsibility, ensuring that innovation leads to inclusive and sustainable growth. At the same time, individuals must embrace lifelong learning and continuously refine their skills to remain competitive in an AI-driven economy. Moreover, by fostering the spirit of trust and collaboration, we can cultivate a digital landscape where adaptability fuels shared prosperity rather than mere survival. Let us keep in mind that in this evolving era, success is not defined by man versus machine, but by man and machine working in synergy to unlock new possibilities and drive human progress.

AI is not just a tool; it is a game-changer. But the more it evolves, the more pressing ethical and social dilemmas it would create. Are we designing AI to enhance human potential, or are we creating competitors that could render us redundant? Survival in the AI era requires a mindset shift. Instead of fearing automation, individuals must learn to work alongside AI, developing skills that complement machine intelligence. Education systems must evolve, focusing on creativity, adaptability and ethical AI governance. Governments must implement responsible regulations to prevent AI from deepening economic inequalities or undermining personal freedoms.

Digital Darwinism is real. The survival game of AI and algorithms has begun, and there are only two choices: evolve with

AI or be left behind. The future belongs to those who embrace AI—not as a threat, but as a catalyst for progress. The rise of AI and algorithms is not inherently a zero-sum game. It is within our power to shape this technological revolution in a way that promotes intrinsic human social values. The 'survival of the fittest' need not be a dystopian race to the top, but rather an opportunity to redefine what it means to thrive in the digital age. The choice is ours: Will we evolve and thrive, or will we resist and perish? The time to decide is now. The future is not predetermined—it is ours to shape. Are we ready to play the game?

References

Goodwin, Tom. *Digital Darwinism: Survival of the Fittest in the Age of Business Disruption*. Koganpage, London: 2018.

Kreutzer, Ralf T. and Karl-Heinz Land. *Digital Darwinism: Branding and Business Models in Jeopardy*. Springer, Berlin: 2014.

Lee, Keun Se and Kim Eun Ha. "Application of Dé-coincidence and Its Expansion to Northeast Asian Political Society". *Journal of Dharma* 48/3 (2023): 315-332

Schwartz, Evan I. *Digital Darwinism: 7 Breakthrough Business Strategies for Surviving in the Cutthroat Web Economy*. Broadway Books, New York: 1999.