Responsible Technology for a Sustainable Future

Marcel Simonette & Mário E. S. Magalhães

The history of humanity has several examples of how technology has caused changes in society. The 21st century is not different. Technology has become indispensable to people's daily lives. It significantly permeates modern society in everyday actions, such as communicating, working, learning, and entertaining ourselves. It's common to talk about surfing the internet. Technological progress is leading society to navigate new seas in an uneven, interconnected, and digitalized world. Although technology offers many benefits and conveniences, it also presents challenges and ethical dilemmas.

In the digital age, it is essential to prioritize responsible technology practices. Emphasizing these practices is beneficial and imperative to foster a sustainable and equitable future for all members of society. Responsible technology practices are crucial for crafting a future where technological advancement contributes to the welfare of all individuals and the global ecosystem, ensuring that future generations inherit a world where technology is a source of empowerment and progress, not inequality or harm.

Responsible technology includes a wide range of principles and practices aimed at minimizing the unplanned effects of technology while maximizing its benefits and expected results. It involves designing, developing, and deploying technological solutions considering their social, environmental, and ethical implications. It requires a proactive approach prioritizing transparency, accountability, inclusion, and sustainability throughout the technology lifecycle—from buzz to bust.

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Responsible technology practices are based on principles of transparency, accountability, and inclusivity both in the use and the development of technology, ensuring that the benefits of technology are accessible to everyone, irrespective of their socioeconomic background, time availability, and culture. The practices promote a healthier planet, prioritizing responsible technology practices for crafting a future where technological advancement contributes to the welfare of all individuals and the global ecosystem, ensuring that future generations inherit a world where technology is a source of empowerment and progress, not inequality or harm; a technology in which there is explicit and implicit governance. State bodies conduct explicit governance, and companies and private entities conduct implicit governance.

The governance of the technology ensures equitable access and inclusion for all people, regardless of their socioeconomic status, geographical location, or physical abilities. In a world where the problem of digital inclusion persists, it is crucial to narrow this gap by providing accessible and affordable technological infrastructure, such as broadband internet access and digital literacy programs, to underserved communities. By promoting digital inclusion, it is possible to empower people to fully participate in the digital economy and harness the transformative power of technology to improve their lives.

Responsible technology prioritizes data privacy, security, and ethical use of data. In an era where personal data have become a valuable commodity, it is essential to establish privacy regulations and security protocols to protect people's sensitive information from unauthorized access, misuse, and exploitation. Furthermore, ethical considerations should guide the development and implementation of artificial intelligence (AI) and machine learning algorithms to prevent biases, discrimination, and unintended consequences. By incorporating ethical principles, such as fairness, transparency, and accountability, into AI systems, it is possible to mitigate

the risks of algorithmic biases and ensure that technology serves the greater good.

Another relevant aspect of responsible technology is the commitment to environmental sustainability, minimizing the ecological footprint of technological innovations. Responsible technology adopts eco-friendly design principles, promotes energy efficiency, and embraces circular economy practices to extend the lifespan of electronic devices and minimize waste generation, thus addressing the significant environmental challenges presented by the rapid proliferation of electronic waste (e-waste), energy-intensive data centres, and harmful emissions associated with digital technologies. By embracing sustainable technological solutions, such as renewable energy sources and green computing initiatives, it is possible to reduce the environmental impact of technology and pave the way for a greener and more sustainable future.

Promoting ethical labour practices and supporting initiatives prioritizing worker well-being can create an equitable technology industry.

Responsible technology extends to the ethical treatment of workers involved in production and manufacturing processes. The extraction of rare earth minerals and the manufacturing of electronic devices often involve labour practices that exploit workers and violate their rights. Companies must uphold ethical labour standards, ensure safe working conditions, and provide fair wages to workers throughout the supply chain. Promoting ethical labour practices and supporting initiatives prioritizing worker well-being can create an equitable technology industry.

Promoting digital literacy and critical thinking skills is also a characteristic of responsible technology, which empowers people to navigate the complex digital landscape. In an age of widespread misinformation, fake news, and online manipulation, it is crucial to provide individuals with the necessary knowledge and abilities to discern credible information sources, evaluate the reliability of online content, and protect themselves from digital threats, such as phishing scams and identity theft. Investing in education and digital literacy programs can empower people to become informed and responsible citizens who positively contribute to the digital society.

In conclusion, responsible technology is not just a lofty ideal. It is a moral imperative that demands collective action and commitment from all stakeholders, technology companies, policymakers, researchers, and users. By adhering to the principles of equity, transparency, accountability, and sustainability, the tech industry can leverage the transformative power of technology to address urgent social challenges, promote social justice, and build a more inclusive and sustainable world for future generations. At the edge of a digital revolution, we must take this opportunity to shape the future where technology serves as a reasonable force, enriches lives, and preserves the planet for future generations.

Marcel Simonette *is researcher at CEST-USP and Professor of the MBA-USP Data Science and Analytics at PECE – USP*

Mario E. S. Magalhães *is researcher at CEST-USP, his focus on Enterprise and IT Architecture, Digital Transformation, Dispute Resolution and Engineering Ethics in Sociotechnical Systems.*

Academic Coordinator: Edison Spina

This article is a result of the author's ascertainment and analysis, without compulsorily reflecting CEST's opinion.