The Age of a Moral and Ethical Artificial Intelligence

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Abstract
This paper provides an overview of today's values for building and using Artificial Intelligence in day-to-day operations, but the focus of the research is on the judgment values developed to create a more moral and ethical AI that is in line with today's macroeconomic needs and aims to achieve the goal of sustainable economic development. This research follows the concept of a case study combined with a qualitative research regarding our actual status quo in offering moral and ethical value to machines and to software that could one day replace informal social institutions. Also, the main focus of this research paper is to highlight if we could use or insert Artificial Intelligence as guidance tool to our general wellbeing and also to empower automatization as mechanism for a sustainable future, because today's automated corporate governance is based on standardized processes for performance management, standardized processes for advanced analysis.

Keywords

Artificial Intelligence, economic development, evolution, morality, ethics

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Introduction

The majority of current research on the ethical and social nature of Artificial Intelligence (AI) has concentrated solely on establishing ethical principles and general measures to program the machine learning sector and its influential one, namely the programming of AI algorithms. Although these elements are important in understanding the relationship between social norms and the actual intrusion of AI, there is still no dedicated and direct analysis of what can lead to widespread use of AI or the risks of developing machine-based solutions (Bodislav et al., 2020). Learning without objectives to cover the evolution of society and potential intersections with scenarios for the development of population ideology over 20-30 years (Burlacu et al., 2020). This article seeks to provide a direct perspective on the usefulness of moral values found in AI, which may provide some insight into the antithesis between using AI in building the functional pillars of future democracies or allowing access to decision-making for people without dedicated qualities. phenomenon.

1. Artificial Intelligence, where to?

The advancement of AI as a technical and social phenomenon goes hand in hand with the development of machine learning and provides us with a perspective on the evolution of humanity in the last 15 years (Bodislav et al., 2020), because only in the last 5 years has the potential of AI been realized because the hardware area has (re)begun to make significant leaps toward the introduction of the current generation of quantum computers (Rădulescu et al., 2020). These computers have such a high level of analytical capabilities that they can't be evaluated on the same scale as old-fashioned computers, a simple example being the leap made by the new Apple M1, M1 Pro, M1 Max and M1 Ultra processors, which have succeeded since launch to match and surpass Intel's high-performance processors (i7 and i9), and this leap was not necessarily due to a revolutionary hardware architecture, but to a way of transposing neural

networks and hardware mechanisms for building and understanding AI, and of machine learning processes (Bodislav et al., 2021).

After the comprehensive decoding of the genetic code at the beginning of this millennium, the race to duplicate the human brain by a hardware solution was the next objective targeted, but the technique was complex (Popescu et al. 2021). The development of solutions aimed at replicating the brain did not meet expectations, but there is now a fresh hope - the quantum computer tackles the hardware problem by processing information considerably quicker than a human brain (Burlacu et al., 2021). However, the language and work processes required to emulate neural activity do not exist, demonstrating one of the side effects of technological development, namely the reduction of the capacity for general analysis of the steps required to solve a problem, the conclusions of which must be drawn during the development of work processes (Pazzanesse, 2020). The sector is appealing to huge organizations since we are dealing with a market that will achieve a turnover per branch of more than 17 trillion dollars in a maximum of ten years. And, from a research standpoint, it can be stated that the emphasis was solely on functioning, rather than the component of social complexity and its influence on sustainable development (Belostecinic et al., 2022). An important factor that has influenced AI is that it has invested heavily in companies, particularly start-ups, that are dedicated to the real economy through infusions of technical and evolutionary know-how in the fields of transportation, health, production, and government decision analysis over the last five years.

However, as a result of the intersection of applied AI and everyday economics, the algorithms found behind AI tend to generate either positive or negative output, beginning with algorithms that can generate a discriminatory order of an AI (for example, it has been observed that solutions used for facial recognition do not work optimally for people who are racial minorities or members of the LGBTQ + spectrum), or situations where the purpose of the AI is unclear. To avoid such impacts, the UN Universal Declaration of Human Rights has become the text of the law for corporations creating self-driving AI-based solutions in crucial industries (especially among self-monitoring and smart weapons). Another example of using AI to outperform the stock market is the usage of solutions that are accessible on the market but are not meant to outperform the system, but rather to outperform the market. to the least technically talented, and the required legislation are expected to be developed over the next 3-5 years. The more we understand about AI's positive and harmful possibilities, the more pressing the need for a worldwide regulating agency becomes. For example, when it decides to murder a human subject, the moral criteria of the choice to create smart weapons must be developed, but this can just be the beginning of a complicated process dedicated to the "humanization" of AI that can evolve over time. a situation in which an autonomous drone can decide not only to kill a subject, but also to target a family or a school, regardless of the number of collateral victims, and this can be done without direct psychological impact, effectively removing you from the cognitive process that "brakes" human nature, that is, what good you are.

We have a responsibility to promote and educate ourselves, to consider potential consequences, and to use our moral compass because we are in the midst of a race to gain wisdom, and the impact of technology may increase proportionally as it advances. Big, either good or negative, influence, and when the impact is negative, difficulties occur. To mitigate the negative consequences, we must grow smarter both personally (as a set of ideals we apply throughout our lives) and collectively (as a set of regulations, legislation, policies developed and implemented at the company level). Unfortunately, technical advancement in hardware has expanded AI and grown at a quicker and stronger rate than the present rate of progress in wisdom at the individual and social levels, preparing the path for those who do not desire multilateral and sustainable development but have planned repercussions. Massive large-scale destruction This is akin to a scenario in which nuclear bombs are widely available and utilized by immature individuals, potentially leading to a global nuclear war, and the whole active nuclear arsenal of industrialized countries is linked to intelligent solutions to counter the adversary. It is also quite likely that it will become self-sufficient in the near future.

2. Research methodology for further understanding Artificial Intelligence

In these days of technological progress and positive development of human behavior aided by primary A.I. (Artificial Intelligence), we stress concerns related to economic growth generated by data analysis of existing challenges. Many challenges are non-technical in origin and may be filtered using business intelligence elements extrapolated at general AI level. To go beyond the strictly technological perspective and its manifestation in traditional economic vision, we list the following potential issues (Bodislav, 2015):

1. Undefined metrics for the success of a created policy applied at the macroeconomic level;
2. The political class and culture are defocusing the executive vision;

3. Direct implementation and functional connections between properties of SAAS (software as a service) or BI (Business Intelligence) technologies are nonexistent;

4. Solutions used at the macroeconomic level are not connected and have low coverage at extremely high costs.

This is why in this research we follow the concept of a case study combined with a qualitative research regarding our actual status quo in offering moral and ethical value to machines and to software that could one day replace informal social institutions.

This manner, there is no direct value of the investment, as there is with Return on Investment. If traditionalist principles are violated, the second element of the problem, that of losing track of AI services and so reducing efficiency and increasing costs, is achieved. Macroeconomic policies are viewed as undertakings that grow to be effective via the convergence of numerous aspects, such as people, technical tactics, and technology. The society reproduced in a corporation or a ministry may lead to the rejection of assentimental AI solutions, thereby canceling any government-guided admissions into the macroeconomic sector.

3. Ethics and morality in Artificial Intelligence

Numerous initiatives in the last years have taken two major paths to promoting the ethical practice of AI (Luccioni, 2020): a) proposing principles to guide the sustainable development of AI or b) evaluating issues regarding the social impact of AI.

In recent years, the topic of research and ethical and moral practice in technology has grown in various parts of the IT community, and the various initiatives that have been proposed reflect the interest and concern that many members share. In the United States, for example, the Association for Computing Machines (ACM) has proposed a Code of Ethics and Professional Conduct to be used by all ACM members and to guide them in the use of computer science. The Montreal Declaration contains the most important analysis of AI's ethical and moral responsibility.

The Montreal Declaration on the Sustainable Development of Artificial Intelligence, developed in 2017-2018, is one of the most notable approaches to establishing guidelines for AI implementation. It was created with the idea that AI would eventually affect all sectors of society, and that it would require principles to guide its development in order to ensure its adherence to human core values and the advancement of society. The declaration contains ten principles, from the protection of privacy to equal representation, some of which directly concern accountability and ethics; for example, the precautionary principle states that *"Everyone involved in the development of Artificial Intelligence must be cautious, anticipating, as far as possible, the negative consequences of using Artificial Intelligence systems and taking appropriate measures to avoid them."* (Montreal Declaration of Sustainable Development of AI, 2017-2018). The declaration's overarching goal was to raise awareness of the ethical and moral issues surrounding AI development and to enable all members of society on a global scale to participate in the enhancement of its development framework.

The Montreal Declaration, on the other hand, goes beyond theoretical ethical principles by including recommendations for an ethical digital transition that includes the entire society and all its layers, from researchers to decision makers (Luccioni, 2020). It includes a proposal, for example, to audit and validate the use of AI systems through mechanisms and accreditations designed to prevent discrimination and unfair or biased behavior. Specific methods for strengthening democracy and reducing the negative environmental impact of AI are also included. This is significant because AI will become a part of everyday life at the individual level and will have an impact on society as a whole, whether they are programmers, politicians, students, lawyers, or even companies whose primary goal is the development of AI.

4. Ethical and moral behavior in Artificial Intelligence

AI-based video surveillance technology, for example, can improve public safety by detecting real-time crime using surveillance cameras - but there is a catch: security functions can be abused to track people and establish a status in which confidentiality is threatened by those that own and control the technology.

A similar technology can be found in military autonomous drones that use computer vision to analyze and identify their target, being a serious threat to global security and democracy due to a lack of human influenced type of surveillance. Aside from the security risk, such weapons would pose a moral and legal risk: AI technology isn’t yet capable of understanding and redefining in its own terms the dynamics found

in the psychological and social context in which such a targeted attack could occur - in a direct, sufficient, and consistent manner with international law defining situations of war or general morality. Unfortunately, the most common argument in favor of the development of autonomous weapons is that they are required as a precautionary measure and technological advancement, respectively, in order not to fall behind other countries and companies developing similar technical capabilities. In reality, weapons designed to defend against assault drones differ significantly from standard assault drones and should not be lethal stand-alone weapons because they are designed to destroy other weapons, a perfectly functional solution used in Israel under the name Iron Dome.

Another prevalent argument is that an international treaty would be worthless since certain nations would refuse to sign it, as proven by climate change sustainability and awareness conferences such as the one held in Paris in 2015. The false argument is that regulating deadly autonomous weapons might imperil AI innovation, despite the fact that it has been developed with tremendous success in a civilian environment (especially in university and major technological businesses – Serafimova, 2020).

Another potential threat to democracy posed by AI development could be increased ability to monitor and target individuals, as well as more subtle power to influence them, such as through the AI-based advertising sector, automation of online trolls, and other types of psychological manipulation using the internet and social networks. Using artificial intelligence to influence political campaigns, such as the 2016 US election or Brexit, is just the beginning of what may be done when a self-replicating software teaches us how to transform our online environment in a customized yet devoted manner. a third party who has a direct involvement This is due to the fact that micro-targeting enables advertising to be fully individualized, depending on people's political beliefs, social networks, and personal histories (including incognito or private). Although it may not bother people when it comes to selecting a brand of fast food products, when the goal is consistent with certain sources of profit or political power-play at the level of a corporation or political organization, but the effect obtained is detrimental to individual and collective interests, it becomes necessary to outline social norms, laws, and regulations to protect the individual and even the concept of democracy from such psychological manipulation. Where is the line drawn between education and manipulation? Although a basic quantitative solution may be offered by examining internet advertising expenses, the quality found in value judgements that are still tied to human nature cannot be recreated. Value judgements indicate the ethical and moral aspect of human character and give a semi-objective answer for striking a balance of power between the autonomy allowed to AI and the well-being attained by employing it as a socioeconomic advancement solution. Aside from the moral hazard of psychological manipulation, it is questionable if tailored advertising is advantageous to society from a merely economic viewpoint, as it tends to benefit financially wealthy corporations, perhaps holding down innovation via misappropriation of funds intended for it. We find the new segment of manipulation and deception known as deep-fake, a concept that presents images, videos, and fake news generated by AI, strongly associated with the misuse of online advertising and political manipulation through the use of AI. It is now possible to synthesize images and sounds in a controlled manner, for example, using deep-fakes to make a video with a president caught in an intimate pose or declaring war on a temperamental enemy, thanks to rapid progress on generative neural networks (to which is added on the hardware side, the availability at an increasingly low price of processing systems that allow the large-scale generation of deep-fake solutions).

Other elements discovered in connection with the implementation of AI include the effect on the labor market and not the perception that hundreds of millions of people will lose their jobs. This has been demonstrated to be flawed in principle in the case where, a century ago, the tractor was introduced as the primary tool for processing agricultural crops, and, despite the world's reservations about its introduction on the premise that many jobs would be lost (Bodislav and Bran, 2017), it came as a mechanism to increase productivity, with the role of functional annex of the individual in agricultural work, this being the role of AI in the next 20-30 years.

5. The competitive advantage had by Artificial Intelligence compared with traditional solutions

Neural networks are known as "black box technology" because the mathematics behind them is still a research topic, with world-renowned researchers working on it. AI is what the wheel was to Mesopotamian builders 7,000 years ago. Modern statistical analysis applications are utilized by economists and financiers all around the world, but their breadth is dwarfed by the use of artificial intelligence (AI) for risk assessment, macroeconomic forecasting, and financial market monitoring.

Statistical analysis should be viewed as a supplement to AI in financial and economic analysis. While the former excels at problem solving with aggregated data, the latter can help with examining the value of the dataset in granular, diversified, unstructured, and high-volume ways. The data set's granularity, in

particular, allows us to reveal hidden patterns and actions of economic agents. Another advantage of AI is that it enables real-time design: the use of different data sets to produce real-time economic projections; this near-instantaneous reaction provides us with a competitive edge. Machine learning algorithms take techniques from long-standing statistical approaches in addition to being utilized to investigate current, real-time big data sets. Because of nonlinearity and impacts, several aspects are difficult to model during crises. AI algorithms are executed without any prior assumptions and are capable of adding qualitative information, such as textual data, for gauging risks and agents' expectations.

The following are the main distinctions between statistical analysis and AI automation (Bodislav, 2022):

• Automated AI is based on data and focuses on algorithm design, not traditional theory;

• Instead of statistical tests, AI uses a different and complex mechanism, creating a high degree of quality, dedicated to matching data sets;

• The key issues of automated AI are the selection and regularization of the features needed to validate and filter the values it pursues.

6. Discussion and overviewed results

The main focus of this research paper is to highlight if we could use or insert Artificial Intelligence as guidance tool to our general wellbeing and also to empower automatization as mechanism for a sustainable future, because today's automated corporate governance is based on standardized processes for performance management (financial analysis, planning, budgeting, forecasting (Boyer et al., 2011), standardized processes for advanced analysis (predictive analysis, data mining), and standardized processes for information management (data profiling, data quality testing, data warehousing and data integration – Bodislav, 2015). The alignment of business strategy with economic or national strategy shapes the efficient execution of proposed goals and with step-by-step adhering for members of the organization or the population by absorbing the organization's or national behavior, which should be optimized depending on the existent or developed risk, and everything automated by using business intelligence principles.

Conclusions

These concluding thoughts will not focus on elements resulting from AI that can be directly influenced by the "cause-effect" principle, such as those found in the fields of energy, transportation, education, and health, where AI involvement will lead to significant savings, even to the point of saving lives, and this direct cause-and-effect aspect can also be less extended in the case of environmental protection and combating climate change. The direct implications of AI will generate solutions that can be applied as a recipe prepared in the kitchen, propelling these areas to new heights, provided we recognize that the main winner, in addition to society, the environment, and reducing the burden on the state budget, is AI in itself and its creator.

Technology in general, and more specifically machine learning and its functional effect, AI, is currently the most powerful agent of paradigm shift since the Industrial Revolution; however, the innovative disruptor can also become a disruptive factor if its developers do not follow through (Bodislav, 2022). The true potential of AI is that it will make the world a better place in any form, but the moral character and ethics in its evolution can be the key to seeing if the future developed is sustainable for all cohabitants of Earth and possibly in the next 25 years. as well as for the planet Mars At the moment, there is a need to hold AI creators accountable and to provide them with a pre-ideological framework in which to develop AI's moral and ethical aspirations, which can be accomplished by putting established industry players on the same playing field as politicians or experts who understand the case in question.

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