

Artificial Intelligence Between Ethics and Security Risks

الذكاء الاصطناعي بين الاخلاقيات والمخاطر الامنية

L'intelligence artificielle entre éthique et risques de sécurité

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ملخص: أصبح للذكاء الاصطناعي قدرة كبيرة من شأنها أن تحدث ثورة في عالم الأعمال، وهذا ما يؤثر تساؤلات عديدة حول الوظائف التي يمكن أن يؤديها الذكاء الاصطناعي بدلا من الإنسان. بما في ذلك الوظائف الإدارية، والعمل القانوني، والهندسة المعمارية والإدارة، الى جانب الفوائد الضخمة المحتملة قد تحصل عليها قطاعات عديدة جراء استخدام تقنيات الذكاء الاصطناعي، والتي في النهاية قد تؤدي إلى زيادة القيمة السنوية الإجمالية للسلع والخدمات المنتجة عالميا ، , حيث تعمل الثورة التكنولوجية على تغيير حياتنا بسرعة هائلة، مما يغير بشكل كبير الطرق التي تعمل بها، وحتى تلك التي نعيش بها سوياً. إلى جانب الاستخدام المتزايد التعقيد للبيانات الضخمة ، ، سيؤدي الذكاء الاصطناعي إلى شكل جديد من الحضارة الإنسانية. لكن يجب علينا أن نتأكد من تطويره من خلال نخب إنساني قائم على القيم وحقوق الإنسان.

الكلمات المفتاحية: الذكاء الاصطناعي؛ المخاطر الامنية ؛ اخلاقيات القانون ؛ الذكاء البشري؛ الاضطراب الاجتماعي

Abstract : Artificial intelligence has a great ability that will revolutionize the world of business, and this raises many questions about the jobs that artificial intelligence can perform instead of humans, including administrative functions, legal work, architecture, and management. In addition to the huge potential benefits that many sectors may obtain from the use of artificial intelligence technologies, which in the end may lead to an increase in the total annual value of goods and services produced globally, as the technological revolution is changing our lives at an enormous speed, which greatly changes the ways in which we work, and even those in which we live together. Combined with the increasingly sophisticated use services produced globally, as the technological revolution is changing our lives at an enormous speed, which greatly changes the ways in which we work, and even those in which we live together. Combined with the increasingly sophisticated use

Keywords : artificial intelligence; security risks ; ethics of law; human intelligence;social disorder.;

Résumé : L'intelligence artificielle a un grand potentiel pour révolutionner le monde des affaires, ce qui soulève de nombreuses questions sur les tâches qu'elle peut effectuer à la place des humains, notamment les fonctions administratives, le travail juridique, l'architecture et la gesti En plus des énormes avantages potentiels que de nombreux secteurs peuvent tirer de l'utilisation des technologies d'intelligence artificielle, qui pourraient en fin de compte conduire à une augmentation de la valeur annuelle totale des biens et services produits dans le monde. La révolution technologique change nos vies à une vitesse fulgurante, modifiant radicalement nos façons de travailler, et même nos façons de vivre ensemble. Parallèlement à l'utilisation de plus en plus complexe du Big Data, L'intelligence artificielle conduira à une nouvelle forme de civilisation humaine. Mais nous devons veiller à ce qu'elle se développe selon une approche humaine fondée sur les valeurs et les droits de l'homme.

Mots clés: intelligence artificielle; Risques de sécurité; éthique du droit; l'intelligence humaine ;

Désordre social ;

Introduction :

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Artificial Intelligence (AI) stands as one of the most critical and profound outcomes of the technological revolution that has flourished in the digital age. This is largely due to the emergence of intelligent applications that have profoundly impacted various facets of life, contributing to the advancement and betterment of humanity. AI is rooted in the field of intelligent machine engineering, which focuses on developing devices and computer programs capable of mimicking human cognitive processes. These systems are designed to acquire information, analyze data, identify patterns, and make informed decisions, thereby enabling them to exhibit human-like responses to various situations. As a result, AI systems can effectively execute tasks assigned to them, demonstrating capabilities that parallel human intelligence.

AI is often regarded as a driving force behind human progress, given its remarkable contributions across personal, medical, industrial, military, and commercial domains. At its core, AI aims to enhance human well-being, protect lives, and ensure safety. Examples of its applications include the deployment of robots in hazardous industrial environments, the use of AI in military combat scenarios, health monitoring for patients, assistance for individuals with disabilities, and the safeguarding of homes and institutions against theft and security breaches, among other critical uses.

However, despite the numerous benefits AI has brought to humanity, it raises a pressing question:

How can we regulate the negative ethical behaviors stemming from the increasing reliance on AI technology? These behaviors can be categorized into security, social, economic, humanitarian, and legal implications. This concern has prompted global attention toward the necessity of establishing an ethical framework to govern the use of AI within the information society. This society is characterized by a shift from legal oversight to self-regulation and the prioritization of psychological references over social ones.

This leads us to propose a central hypothesis: Justice in the information society cannot be achieved solely through legal means but must also be grounded in virtues, human values, and universal ethics that transcend individual interests. In this context, the strength of an ethical framework outweighs the power of laws.

Research Objectives:

- Emphasizing the Educational Dimension:

There is a critical need to focus on the educational aspect in addressing the risks associated with AI. Education plays a pivotal role in nurturing human conscience and fostering ethical commitment, which can serve as a substitute for legal enforcement.

- Focusing on the Ethical Concerns of Artificial Intelligence, Particularly the Aspect of Identity Manipulation:

This paper highlights the unforeseen dangers posed by AI, which have surpassed all expectations. Today, AI possesses the capability to generate voice, image, and text, enabling the forgery of voiceprints—a technology once used to safeguard personal identity. This development threatens the future of voice biometrics, as it allows individuals to be impersonated and attributed statements they never made.

- Raising Awareness of Ethical Risks:

The rapid and accelerating development of AI has given rise to significant ethical challenges. To counter these risks, it is essential to adhere to a set of ethical values and principles rooted in

humanistic thought. Education can play a vital role in raising awareness about these principles, encouraging individuals to embrace ethical responsibility in addressing the risks of AI, beyond mere legal obligations.

First: The Concept of Artificial Intelligence

1- Definition:

To clarify the concept of artificial intelligence (AI), we can refer to the definition provided by John McCarthy, often regarded as the "father of artificial intelligence." McCarthy defined AI as "the science and engineering of making intelligent machines, particularly intelligent computer programs." This involves creating devices and software capable of thinking in ways similar to the human brain and mimicking human behavior. In this context, artificial intelligence is the process of simulating human intelligence through computer systems, aiming to replicate human behavior, thought patterns, and decision-making processes. However, the term AI should not be applied to any electronic device that operates using a specific algorithm and performs predefined tasks. For a system to be considered artificial intelligence, it must be capable of learning, collecting data, analyzing it, and making decisions based on that analysis, in a manner that resembles human thinking. (D, 1993)

Artificial intelligence, therefore, is a specialized field focused on engineering intelligent machines through computer programs and applications, enabling them to simulate human thinking and behavior. It can also be defined as an electronic counterpart to human cognition, relying on complex computational systems. To qualify as AI, a system must exhibit certain characteristics that allow it to mimic the human mind. These characteristics include:

- The ability to learn: Acquiring information and establishing rules for its use. (Knight K, 2010)
- Data collection and analysis: Gathering and analyzing data to identify relationships, aided by the growing prevalence of big data. (Luger, 2004)

Thinking and perception capabilities:

- Knowledge discovery and application: The ability to identify and apply knowledge effectively.
- Learning and understanding from past experiences: Drawing insights from previous experiences and applying them to new situations.
- Adapting prior knowledge to new contexts: Utilizing past experiences in novel scenarios.
- Rapid response to new situations and conditions: Demonstrating agility in adapting to unfamiliar or changing environments.
- Handling ambiguous situations with incomplete information: Functioning effectively even when information is limited or unclear.
- Evolution, creativity, and visual understanding: Developing the capacity to evolve, innovate, and comprehend both tangible and abstract concepts.
- Decision-making based on information analysis: Making informed decisions after thoroughly analyzing available data.

In summary, artificial intelligence represents a sophisticated integration of computational power, data analytics, and cognitive simulation, designed to emulate and enhance human-like intelligence in machines.

2- The Emergence and Evolution of Artificial Intelligence:

Artificial intelligence (AI) emerged in a quasi-official capacity in 1956, as efforts intensified to harness modern technology to address some of humanity's pressing issues. This milestone was marked by a gathering of scientists specializing in AI research at a conference held at Dartmouth College in Hanover, New Hampshire, USA. These participants went on to become the pioneers of AI research for several decades. (D, 1993)

By the mid-1960s, these research endeavors were generously funded by the U.S. Department of Defense, leading to the emergence of rudimentary robots. However, this progress fell short of meeting the expectations of technology users at the time, prompting scientists to focus their research on maximizing the potential of this technology. Their efforts culminated in the mid-1980s

when researchers successfully developed computers capable of making decisions based on pre-programmed problem-solving algorithms. Nevertheless, developers faced challenges in translating these innovations into practical applications. (Knight K, 2010)

With ongoing technological advancements, computers capable of self-learning and autonomous problem-solving began to emerge. A pivotal moment came in 1997 when scientists equipped a computer with a vast array of equations and software, enabling it to compete against the world's best chess player at the time. The historic match pitted the AI system against Garry Kasparov, the reigning world chess champion, and the machine secured a groundbreaking victory over its human opponent. From that point forward, a wave of inventions and enhancements propelled AI into becoming an essential tool across various facets of life. Practical applications of AI began to surface in gaming, speech recognition systems that allowed robots to perform tasks through direct verbal commands, and vision systems that utilized two-dimensional images. Later, systems capable of processing three-dimensional scenes were developed. The concept of AI continued to evolve with the introduction of "machine learning," which found applications in numerous fields. Today, AI has become deeply integrated into everyday life, with prominent examples including facial recognition in smartphones, fully autonomous vehicles, and advanced safety systems in many cars. (Luger, 2004)

Processes Underpinning Artificial Intelligence are: (oura, November 26_27 ,2018)

- ✓ **Learning:** The acquisition of information and the rules for utilizing it.
 - ✓ **Justification:** The use of existing rules to derive approximate or definitive conclusions.
 - ✓ **Self-correction:** The ability to automatically identify and rectify errors.
- To implement artificial intelligence, the following components are essential:
- ✓ **Algorithms:** Required to outline methods for utilizing the acquired information.
 - ✓ **Programming Language:** Used to represent both the information and the algorithms.

3- Characteristics of Artificial Intelligence: (Sabea, 2018)

Artificial intelligence boasts several key characteristics and advantages, including:

- Solving problems even with incomplete information.
- Thinking, perceiving, acquiring knowledge, and applying it effectively.
- Learning from past experiences and adapting them to new situations.
- Responding swiftly to new circumstances and conditions.
- Handling complex and challenging scenarios with ease.
- Navigating ambiguous situations despite limited information.
- Assessing the relative importance of elements within known situations.
- Envisioning, creating, and comprehending visual information.
- Providing data to support decision-making processes.

The following table summarizes the key differences between intelligents of tware and conventional programs:

Table 1: The Difference Between Conventional Programming and AI-Based Programming

Non-Smart Programming	AI-Enabled Programming
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A conventional computer can only respond to specific, pre-defined instructions.	A computer equipped with AI can respond to specific questions while adapting to new inputs.
Any modification to the program requires changes to its overall structure.	Modifications to the program are seamlessly integrated without altering its core structure.
The program is heavily affected by modifications, which are often slow and difficult to implement.	Modifications are implemented quickly and effortlessly.

Source: (oura, November 26_27 ,2018)

3. The Importance of Artificial Intelligence : (D, 1993)

The significance of artificial intelligence is reflected in the following points:

A. Preserving Accumulated Human Expertise: Artificial intelligence plays a crucial role in transferring accumulated human expertise to smart machines, safeguarding this knowledge from being lost and making it accessible to future generations. By analyzing historical data and prior experiences, intelligent systems can identify patterns and rules that aid in making more accurate decisions in the future. In this way, AI serves as a bridge between the past and the future, transforming human expertise into scalable and improvable digital knowledge.

B. The Role of AI in Sensitive Fields: AI plays a pivotal role in various critical domains such as healthcare, security, and energy. For instance, in healthcare, AI can enhance diagnostic accuracy and provide personalized treatments based on genetic data analysis. In cybersecurity, it helps detect and respond to threats more swiftly. Additionally, AI can optimize the management of natural resources, making it an indispensable tool for achieving sustainability.

C. Reducing Risks and Psychological Stress: Smart machines are capable of performing hazardous and labor-intensive tasks, such as mining or bomb disposal, thereby minimizing human exposure to danger. Furthermore, robots and intelligent systems can participate in search and rescue operations during natural disasters, accessing areas that are difficult or impossible for humans to reach. By taking on such tasks, smart machines allow humans to focus on creative and strategic endeavors, reducing psychological stress and improving overall quality of life.

D. The Role of AI in Complex Domains: AI has the ability to process vast amounts of complex data in record time, making it an essential tool in fields like finance, engineering, and science. For example, intelligent systems can analyze financial data to predict economic fluctuations, enabling smarter investment decisions. In engineering, AI can optimize design and production processes, leading to greater efficiency and cost reduction.

E. Enhancing Scientific Research and Discoveries: AI can analyze scientific data faster and more accurately than humans, paving the way for groundbreaking discoveries in fields such as medicine, physics, and chemistry. In medicine, for instance, AI can analyze genomic data to develop targeted treatments for complex diseases. It can also be used to analyze astronomical data, uncovering new insights into the mysteries of the universe. In this way, AI acts as a catalyst for scientific discovery, accelerating research and opening new frontiers for innovation.

Artificial intelligence is not merely a technological tool but a transformative force that reshapes how we live and work. By enhancing efficiency, reducing risks, and unlocking new possibilities for innovation, AI proves to be a cornerstone in building a smarter and more sustainable future. It represents a paradigm shift in how we interact with technology and the world around us.

4. The Objectives of Artificial Intelligence : (Sabea, 2018)

The objectives of artificial intelligence are outlined in the following points:

A. Making Machines Smarter and More Capable of Learning: AI aims to develop machines that can learn and understand through existing experiences. Leveraging technologies like deep learning and machine learning, intelligent systems can analyze historical data to identify patterns that enable smarter decision-making in the future. This evolution makes machines more autonomous and adaptable to new conditions without the need for constant human intervention.

B. Enabling Better and Faster Decision-Making: AI provides businesses with a competitive edge by enabling faster and more accurate decision-making. For example, intelligent systems can analyze vast amounts of data in real-time to deliver strategic recommendations that enhance operational efficiency. This leads to cost savings, risk reduction, and faster market entry, strengthening companies' competitiveness in a rapidly evolving business landscape.

C. Improving Pricing and Customizing Services Based on Customer Behavior: AI seeks to enhance customer experiences by analyzing behavior and preferences. For instance, intelligent systems can offer personalized pricing or product recommendations based on individual purchase history and preferences. This approach not only boosts customer satisfaction but also drives sales and improves marketing efficiency.

D. Enabling Machines to Solve Complex Problems: A key objective of AI is to empower machines to solve complex problems using methods such as inference and analysis. For example, intelligent systems can analyze medical data to diagnose diseases with high precision or evaluate engineering data to optimize design and production processes. These capabilities make AI a powerful tool for addressing challenges that demand innovative and timely solutions.

E. Monitoring Data Centers and Improving Their Efficiency: AI can enhance data center management by automatically monitoring systems and identifying potential failures before they occur. For instance, intelligent systems can analyze log data to detect patterns indicative of potential issues, reducing downtime and improving operational efficiency. This results in significant savings in time and energy, enhancing overall organizational performance.

F. Enhancing Productivity Without Increasing Human Resources: AI seeks to boost productivity using existing human resources rather than replacing or expanding the workforce. For instance, intelligent systems can automate routine and repetitive tasks, freeing employees to focus on creative and strategic initiatives. This approach not only enhances operational efficiency but also improves workplace satisfaction and employee well-being.

G. Simplifying Interaction with Technology: AI aims to make technology more accessible by simplifying human-machine interaction. For example, intelligent systems can provide intuitive user interfaces based on voice or image recognition, making technology more inclusive for all, including individuals with disabilities. This approach fosters digital inclusivity and helps bridge the technological divide.

The table below illustrates the difference between current weak artificial intelligence and the envisioned strong artificial intelligence.

Table 2: Comparison between Strong AI and Weak AI

Strong AI	Weak AI (Narrow AI)
General Artificial Intelligence	Specialized (Specific) Artificial Intelligence
Simulates human consciousness and genuine behavior.	Simulates a specific aspect of human cognition without consciousness
Applies intelligent programs to any problem.	Applies intelligent programs to a single, specific problem

Makes broad decisions and solves problems comprehensively	Makes narrow decisions and solves highly limited problems
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Source: (oura, November 26_27 ,2018)

This table provides a detailed comparison between **Strong AI** and **Weak AI**, highlighting the fundamental differences in their capabilities and applications.

- ✓ **Strong AI** refers to **Artificial General Intelligence (AGI)**, which aim to replicate human-like cognitive abilities, including consciousness, self-awareness, and the capacity to understand, learn, and apply knowledge across a wide range of tasks. Strong AI is not limited to specific domains; it can tackle any intellectual challenge that a human can, such as reasoning, problem-solving, and even emotional understanding. For example, a Strong AI system could theoretically engage in creative tasks like writing a novel, making scientific discoveries, or holding philosophical discussions, all while demonstrating genuine understanding and adaptability.
- ✓ On the other hand, **Weak AI**, also known as **Narrow AI**, is designed to perform specific tasks within a limited context. These systems excel at well-defined functions but lack consciousness, self-awareness, or the ability to generalize their knowledge to other areas. Examples of Weak AI include voice assistants like Siri or Alexa, recommendation algorithms on streaming platforms, or image recognition software. While these systems can simulate aspects of human intelligence, they do not possess true understanding or the ability to operate outside their programmed scope.

The distinction between Strong AI and Weak AI lies in their scope and depth of intelligence. Strong AI represents a future vision of machines that can think and reason like humans, while Weak AI focuses on practical, task-oriented applications that enhance efficiency and productivity in specific areas. As of now, all existing AI systems fall under the category of Weak AI, as the development of Strong AI remains a theoretical and aspirational goal.

AI strives to turn challenges into opportunities by enabling machines to learn and make intelligent decisions. By improving efficiency, reducing costs, and simplifying interactions with technology, AI emerges as a powerful tool for progress across all sectors. It represents a future where technology becomes a collaborative partner in achieving human well-being and sustainability.

5. Principles and Types of Artificial Intelligence: (D, 1993)

There are two fundamental principles:

- **Data Representation:** This involves defining the problem to be solved by representing data in a computer for processing. This representation requires framing the problem in a manner that the computer can understand and process to find a solution.
- **Search:** This principle involves reasoning, where the computer evaluates available options based on objective criteria or those it has deduced itself, then determines the optimal solution.

Based on these two principles and considering the functions of artificial intelligence, its types have been classified as follows:

- **Narrow AI (Weak AI):**

This is the most common type and refers to the use of software to study or solve a specific problem or derive tasks that do not encompass all human cognitive abilities, such as chess programs. This

type of AI does not possess self-awareness but may exhibit a significant degree of human-like capabilities for solving specific problems.

● **General AI (AGI):**

This type focuses on enabling machines to think and plan independently, mimicking human cognition. The Artificial Neural Network (ANN) method is part of AGI research, aiming to produce neural networks for machines similar to those found in the human body.

Superintelligence:

In this type, artificial intelligence surpasses human intelligence, performing tasks better than specialized humans. However, this level of AI has not yet been achieved because humans are still responsible for programming it.

Second: Artificial Intelligence – Positives and Negatives

Artificial intelligence (AI) is currently driving human development and will continue to do so in the future. No one can deny the benefits it offers across various domains—economic, medical, industrial, commercial, educational, and personal—as well as other aspects of daily life. Its development and widespread adoption have led to a leap in human welfare, preserving lives through applications such as using robots for hazardous and dangerous tasks, including battlefield operations, disease detection, patient monitoring, assisting people with disabilities, securing homes, institutions, and banks against hacking, theft, and property damage. AI has also impacted sports and many other areas where its applications have been implemented. (Dumrawi, 2019)

However, when discussing AI, it is essential to address both its positive and negative aspects. AI is a double-edged sword. Among its positive aspects, AI increases human productivity and achievements rapidly, enhances customer service, improves employment trends, and creates new job categories. Robots and other machines will perform routine daily tasks professionally, saving time and effort for employees. Consumers will benefit from improved services delivered with high quality and efficiency, along with tangible changes in healthcare, transportation, and banking services, making them safer. (Mark, 2017)

Of course, human life will improve with the advent of self-driving cars and the expansion of this technology to other modes of transport, such as trains, ships, and airplanes. Companies are expected to reduce costs significantly due to AI applications, which are growing daily, bringing innovations and inventions that will profoundly impact human life. However, like any emerging technology, AI faces widespread debate at the outset, much like cars, airplanes, and other inventions did. Industries and service sectors adopting AI aim to reduce labor costs by automating customer service tasks. Indicators suggest that by 2030, 14% of the global workforce could be replaced due to AI applications. Additionally, concerns about personal privacy arise with the proliferation of AI, particularly regarding the scope of data uploaded online, its circulation, and real-time tracking of human digital behavior. AI enables effective monitoring of customers, employees, and consumers, revealing their behaviors and secrets, which constitutes a breach of privacy. Another anticipated risk of AI is the potential increase in monopolies in certain industries outside the tech sector, attracting top talent and stifling human creativity.

These negative consequences of increased reliance on AI applications warn of further threats across all sectors. (Mark, 2017)

✓ **Military Threats:**

One of the most dangerous implications of AI technologies concerns the right to life. The threat lies in developing these technologies for military purposes designed for mass destruction. What happens if such applications fall into the hands of individuals who do not value human life? Or if they are hacked due to lapses or errors in security measures or tampering with the algorithms controlling them? The risks would undoubtedly be catastrophic, and no one knows what might happen under such circumstances. Currently, there are no international agreements restricting the military use of this technology, posing a global threat to humanity.

✓ **Economic Threats:**

AI applications will affect the quantity and quality of jobs and available employment opportunities. The use of robots in some industries is expected to negatively impact manufacturing, automotive, electrical appliances, and customer service sectors. This threatens to widen the gap between the rich and the poor, as many employees losing their jobs will see reduced income, while companies adopting these technologies will reap enormous profits. The result will be a significant increase in wealth for employers, exacerbating income inequality and potentially destabilizing society, leading to unrest. These consequences must be addressed proactively.

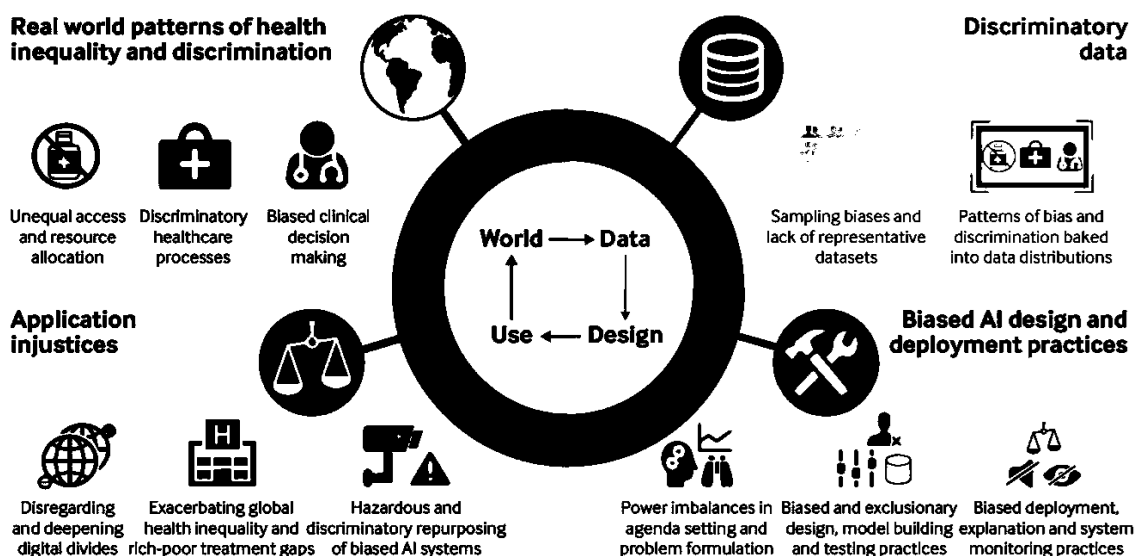
✓ **Social Threats:**

Interacting with and relying on machines will gradually isolate humans from their social environments, leading to rigid and less flexible human relationships. Communication and interaction among humans will become more complex and standardized, losing their emotional and empathetic dimensions.

✓ **Privacy Concerns:**

AI applications providing services to users require access to personal data to function effectively. If users refuse to share their data, they will miss out on the benefits enjoyed by others, creating pressure to sacrifice privacy for convenience. For instance, in 2018, Facebook faced a scandal involving the misuse of user data by a third party, leading to congressional hearings. Efforts are underway to secure data and develop AI without granting excessive access to companies, though these initiatives are still in their infancy.

Figure 1: Biased AI models in a cycle of unfair treatment



Source: (Knight K, 2010)

Thirdly: The Link Between Ethics and Security Risks in Artificial Intelligence

1. Ethical Risks of Artificial Intelligence:

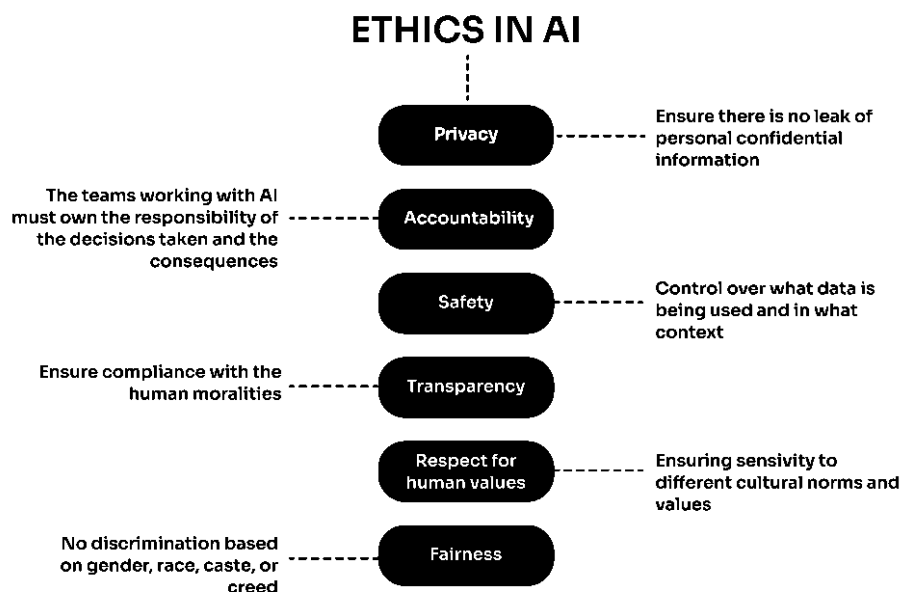
The increasing adoption of artificial intelligence (AI) applications is essential for fostering human prosperity and enhancing well-being. However, concerns about its potential drawbacks and threats persist. It is imperative not to overlook the risks associated with AI, as ignoring its negative aspects while focusing solely on its benefits could lead to unsafe consequences. This is particularly evident when examining the ethical risks that may arise from making certain AI applications accessible to the general public, especially in cases where

these applications are misused. Examples include the availability of tools for generating images, audio, and videos.

For instance, one AI development company has created software capable of generating entirely new human faces based on images of other individuals. This technology enables the creation of realistic human images entirely through AI, without the need for cutting or pasting from existing photos. The scope of this technology extends beyond human faces; it has also been used to generate images of interior home designs and even bedroom scenes, all of which are entirely fabricated. (Knight K, 2010)

These developments underscore the significant negative impact AI has had on various aspects of human life. At the same time, there is a notable absence of regulatory controls or legislative frameworks to govern the use of such applications. This gap highlights the urgent need to establish an ethical framework for engaging with AI technologies. Institutions utilizing AI have yet to engage in in-depth discussions about the principles and ethical considerations that should guide the use of these technologies.

Figure2: Ethical issues with artificial intelligence



source: (Knight K, 2010)

2. Toward an Ethical Framework for AI Society:

While the expansion of AI applications is crucial for advancing human prosperity and well-being, concerns about its potential harms and threats remain. This necessitates the development of regulatory and ethical mechanisms to strike a balance between advancing AI technology and mitigating its risks. Achieving this balance requires exploring educational and legal avenues to establish a system of ethical values that govern interactions between humans and machines, as well as among individuals who use AI. Such a framework would ensure that the benefits of AI are realized without compromising fundamental human rights.

To discuss an ethical framework for AI society, it is essential to first acknowledge that ethics in this context represent the art of navigating life and identifying the best alternatives among the options available to individuals. These ethics should not be rooted in coercion or imposed laws but should instead be based on the principle that human conscience serves as the primary moral authority in this society. In other words, the source of ethical obligation in AI society lies within the individual, emphasizing voluntary commitment rather than external compulsion. This approach distinguishes AI ethics from the ethics of the industrial revolution, which were codified into laws and regulations. AI ethics eliminate the need for external oversight, replacing it with self-regulation and shifting the focus from social norms to psychological ones. (Mark, 2017)

The ethical framework that should prevail in AI society must function as a moral authority guiding human behavior. Its principles and values should align with the ideals of freedom and responsibility. This ethical framework transcends legal or religious frameworks, as justice in AI society cannot be achieved through laws alone. Instead, it must be rooted in virtues, values, and ethics that prioritize the common good over individual interests, drawing from religious teachings and widely accepted social values. This makes the ethical framework more powerful than laws, as it governs human actions without coercion or legal enforcement. It is important to note that emphasizing ethics does not mean replacing laws, as societal order relies on rules and prohibitions. However, ethical responsibility is as crucial as legal responsibility, and the two must work in tandem as complementary forces.

Thus, the ethical framework serves as the moral compass for evaluating human behavior, guiding society toward justice, goodness, and righteousness. However, this framework remains merely aspirational unless it is actively promoted through moral education aimed at instilling these values in individuals. Therefore, it is essential to emphasize the role of educational institutions—both formal and informal—in establishing the norms and values of the AI era.

The focus on ethical considerations in dealing with AI applications arises from the lack of laws regulating the impact of technology on family and social structures. Currently, there are no legal provisions to address how AI technologies influence users' personalities, particularly as they transition from the real world to virtual environments, where they are subject to self-regulation rather than social influences. This indicates that laws alone cannot resolve all the challenges posed by AI, especially those related to individual use of technology under the guise of personal freedom.

While scientific research in the technical aspects of AI is advancing rapidly, progress in addressing its ethical dimensions lags behind. Although many researchers have expressed concerns, and some countries have begun to seriously consider these issues, there is still no comprehensive legal framework or ethical code to regulate the future development of AI technologies. Consequently, it is imperative to raise awareness about the ethical implications of AI, drawing on the risks and threats analyzed in this paper. This effort aims to educate individuals and alert policymakers and companies working in AI. The goal is not to instill fear but to foster informed understanding of the technologies driven by AI.

In this context, some AI development companies have begun to address the ethical dimensions of their products by establishing guidelines for human-machine interactions. For example, Google formed an ethics board to address contentious issues related to AI and to help the company respond to criticism regarding its AI-related ventures. However, when the board's recommendations conflicted with the company's profit-driven goals in AI, the board began to disintegrate, with several members resigning. This was particularly evident when the board's actions threatened Google's ability to secure military contracts for cloud computing. Members such as behavioral economist Alessandro Acquisti announced their departure, and some Google employees petitioned for the removal of additional board members, citing strong opposition to the company's involvement in military projects involving AI-powered destruction's weapons. (Khalid, 2019)

Fourth: Experiences of Different Countries in Dealing with Artificial Intelligence

The European Union

Policies and Legal Frameworks:

- The EU launched the "European Artificial Intelligence Strategy" focusing on promoting AI innovation while ensuring adherence to European values such as privacy and justice.
- The General Data Protection Regulation (GDPR) represents one of the strictest frameworks in the world for data protection, imposing significant requirements on the use of artificial intelligence. (- . (2019). *A European Approach to Artificial Intelligence – A Set of Common Principles and Values*. Brussels: European Commission., 2019)

Innovation and Regulation:

- The United States is a leader in AI, with numerous major companies like Google, Amazon, and Facebook operating in this field.
- Although there is no comprehensive AI law, the U.S. government is developing guidelines and frameworks across various federal agencies to address ethical and security challenges.

Research and Development:

- The U.S. government invests heavily in AI research, including initiatives like the "National AI Initiative Plan". (Floreano, C., & Koenig, L, (2020))

_China

National Strategy:

- China launched the "National AI Strategy 2020-2025", aiming to make the country a global leader in AI.
- There is a strong focus on using AI in healthcare, transportation, and education, with less emphasis on privacy and ethics compared to the West. (Floreano, C., & Koenig, L, (2020))

Japan

Ethical Development:

- Japan developed the "AI Ethical Framework", focusing on safety, privacy, transparency, and equality.
- The Japanese government encourages the development of AI in a way that aligns with the country's cultural and social values.

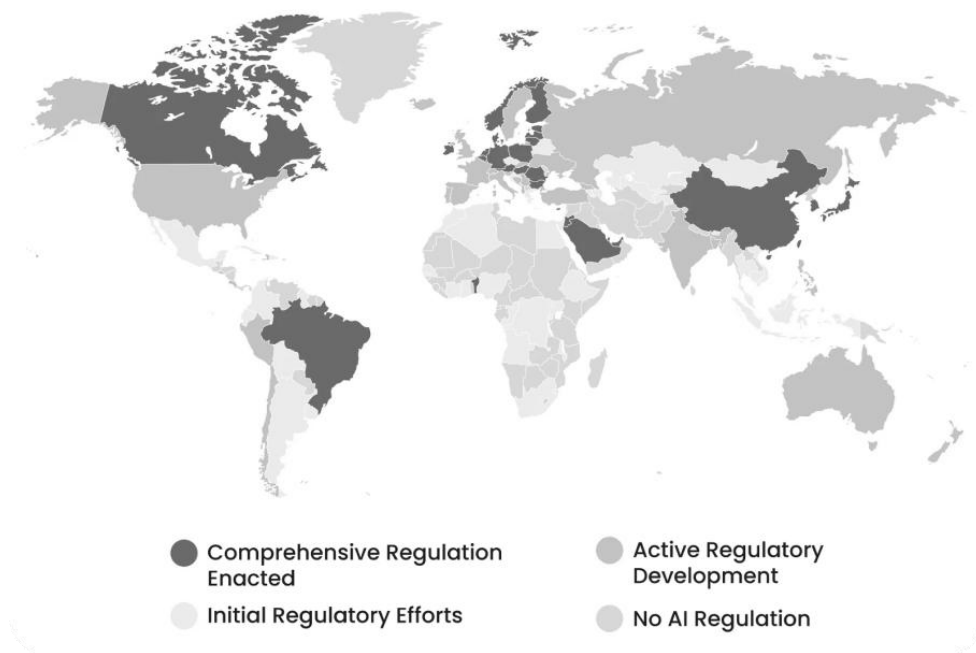
India

Focus on Innovation:

- India launched the "National AI Framework" aiming to achieve global leadership in AI by 2025. (*Artificial Intelligence: The next great era of productivity growth?*. , (2020))
- There is an emphasis on using AI in agriculture, healthcare, and education, with efforts to ensure inclusivity and fairness.

Figure3: Progress in global AI regulation

AI Regulation Progress: 2024 Global Overview



source: (Knight K, 2010)

Conclusion:

Through the research presented, a set of key findings has been **identified** that reflect the complexity of the relationship between artificial intelligence and human society. Despite the great promises AI holds for improving quality of life and enhancing economic and social development, its future is not without significant challenges that demand attention and **addressing**.

As we look to the future, it becomes clear that artificial intelligence represents an unprecedented opportunity to reshape industries, expand **the boundaries of** human capabilities, and improve various aspects of our daily lives. However, to fully realize these potentials, there must be a strong commitment to ethical values, responsible use of technology, and **ensuring fairness** in the distribution of its resulting benefits.

The future of artificial intelligence is not merely a narrative of technological events; rather, it is a dynamic landscape that combines human creativity with machine capabilities to deliver innovative solutions that contribute to sustainable development. Through balanced collaboration between public policies, the private sector, and academic circles, we can build a framework that enhances trust in this technology and ensures its use serves the **shared** human interest.

In short, artificial intelligence is not just a technical tool ; it is a potential partner in shaping a better future for humanity. However, this future depends on how it is designed, regulated, and used in a way that **promotes** fundamental human values. The experiences of different countries in dealing with artificial intelligence show a variety of approaches and strategies. While some focus on innovation and development, others strive to ensure that progress in this field aligns with ethical values and security concerns. International cooperation and knowledge exchange can help develop more effective global frameworks for addressing AI challenges.

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