

"The Knowledge Platform for AI" – The contribution of business

DIRECTORS AI ETHICS FORUM, Harvard University, June 17-18, 2024

Nguyen Anh Tuan, Jeff Saviano, Thomas Patterson, Quynh Nham, Minh Nguyen, Yasuhide Nakayama, Paul Nemitz

I. Introduction

A. Creating The Knowledge Platform for AI.

Since its inception in November 2017, the Artificial Intelligence World Society (AIWS), founded by the Boston Global Forum (BGF), has been at the forefront of shaping the governance of artificial intelligence (AI) and fostering new models for democracy. Through collaborations with global leaders and top AI thinkers, AIWS has introduced innovative initiatives and frameworks aimed at harnessing AI for the betterment of society. These efforts have included collaboration with organizations such as the United Nations, Club de Madrid, Riga Conference, Harvard University, MIT, and universities in Japan, Europe, India, and Vietnam.

Artificial Intelligence (AI) poses significant threats to humanity. To address them, BGF established AIWS in 2017, calling for efforts to make AI safe and beneficial based on the Social Contract for the AI Age. AIWS seeks collaboration from universities, companies, governments, institutions, and individuals to remake the world with AI for a better, safer future. Urgent action is needed to establish new democratic models to harness AI's advantages and advancements while mitigating the risks.

On April 30, 2024, at the BGF Conference "Governing the Future: AI, Democracy, and Humanity" held at Harvard University's Loeb House, BGF announced its intent to create the "Knowledge Platform for AI." Amid the rapid evolution of AI, there is an urgent need for a robust knowledge platform to address gaps in ethical standards. The Knowledge Platform for AI aims to fill this void by providing a centralized knowledge repository that can inform the responsible development of AI. It will serve as a beacon for ethical AI usage, guided by humane principles designed to ensure that AI development aligns with ethical standards and societal values. The principles and values embedded in the Knowledge Platform derive from the Boston











Global Forum's Social Contract for the AI Age and AI World Society (AIWS) Model (see Appendix B).

B. Importance of Building a Knowledge Platform for AI and Ensuring Equality of Opportunity in AI

1. Creating a Robust Foundation:

• The Knowledge Platform for AI builds on historical values, standards, and norms, and political, social, and economic models from global pillars such as the USA, Japan, India, and the EU. This foundation is essential for developing AI systems that are ethical, inclusive, and beneficial to all.

2. Ensuring Fairness and Inclusivity:

• It is crucial to ensure that AI technologies do not perpetuate existing inequalities or create new ones. By building a platform that emphasizes **equality of opportunity**, the benefits of AI can be accessible to all individuals, companies, and countries, regardless of background or resources.

3. Establishing Standards and Regulations:

• The platform will provide a basis for creating international standards, laws, and conventions to govern the development and use of AI. This is essential to maintain the ethical use of AI and to protect individuals and societies from potential risks associated with AI technologies.

4. Promoting Ethical AI Integration:

• The platform will promote the integration of AI in a manner that emphasizes kindness, fairness, justice, honesty, and humanity. This approach will help build a society that values these principles.

5. Humanity Governing AI:

• AI must be governed by the people. The platform will ensure that AI fosters human decision-making rather than dominating or replacing it.

6. Creating Sample AI Assistants:

• Developing AI assistants that focus on compassion, education, and innovation will provide practical examples of how AI can be used to enhance human capabilities and improve quality of life.

C. Role of Business Leaders in This Initiative

Business leaders play a crucial role in this initiative by:

1. Driving Innovation and Adoption:

• Business leaders can drive the innovation and adoption of ethical AI technologies within their organizations, setting an example for others to follow.

2. Investing in Ethical AI Development:

• By investing in the development of AI technologies that adhere to the standards and values of the Knowledge Platform for AI, business leaders can ensure that their companies contribute positively to society.











3. Collaborating with Stakeholders:

• Business leaders can collaborate with other stakeholders, including governments, academia, and non-profits, to develop and implement the standards, laws, and conventions necessary for governing AI.

4. Promoting Inclusivity and Accessibility:

• Ensuring that AI technologies are accessible to all, and not just a privileged few, is essential for promoting equality of opportunity. Business leaders can play a pivotal role in making this a reality.

5. Championing Ethical Practices:

• By championing ethical practices and promoting the values of the Knowledge Platform for AI within their organizations and industries, business leaders can help create a culture that values fairness, justice, and humanity in AI development.

II. The Concept of the Knowledge Platform for AI

A. Definition and Scope

The Knowledge Platform for AI is a comprehensive database of data, information, and expertise drawn from diverse and reliable sources to support ethical and effective development of AI systems. It is a single, accessible database that AI systems can reference when making decisions.

B. Key components and features include:

- 1. Foundation from Human History and Global Pillars
 - Historical Values and Norms: Incorporation of values, standards, and norms from human history, including those from key global pillars: the USA, Japan, India, and the EU.
 - Political, Social, and Economic Models: Integration of political, social, and economic models from these key pillars to create a robust foundation for AI development.
 - Beliefs, Faiths, and Spiritual Values: Embracing spiritual values, beliefs, and faiths of the world's religions as a guide to ethical use of AI.
- 2. Global Standards, Laws, and Conventions
 - Creation of Standards: Developing international standards for AI development and deployment.
 - Legislative Frameworks: Establishing laws and conventions to govern AI usage globally.
 - Governance Models: Formulating governance models to oversee ethical application of AI technologies.
- 3. Ethical Standards: Kindness, Fairness, Justice, Honesty, and Humanity:
 - Ethical AI Integration: Promoting the integration of AI in a manner that emphasizes kindness, fairness, justice, honesty, and humanity.
 - Deep-Applied AI: Leveraging AI deeply within societal structures to enhance these values.









- 4. Humanity Governing AI:
 - Human-AI Interaction: Ensuring that humanity governs AI and that AI assists leaders and individuals in fostering democracy, humanity, and compassion.
 - AI as a Helper: Positioning AI as a tool to aid decision-making and promoting compassionate leadership.
- 5. Sample AI Assistant for Compassion, Education, and Innovation:
 - AI Assistant Development: Creating a model AI Assistant designed to support individuals in the Age of AI.
 - Focus Areas: Emphasizing areas and aspects such as compassion, education, and innovation in the functionalities of the AI Assistant.

III. Building the Knowledge Platform for AI a

A. Infrastructure Development

Technological Infrastructure Requirements

- Developing the Knowledge Platform for AI requires a robust technological infrastructure that can support large-scale AI operations and data processing. This includes high-performance computing resources, secure networks, and scalable cloud solutions to handle vast amounts of data and AI workloads.
- The infrastructure must also incorporate advanced security measures to protect sensitive information and ensure compliance with data privacy regulations. This involves implementing encryption, access controls, and regular security audits to safeguard the platform against cyber threats.

Data Storage and Management

- Effective data storage and management are crucial for maintaining the integrity and accessibility of the Knowledge Platform for AI. This involves creating scalable storage solutions that can handle the exponential growth of data generated by AI applications.
- Data management strategies should include data cataloging, metadata management, and data governance frameworks to ensure that data is organized, accessible, and used ethically. This also includes regular data quality assessments and updates to maintain the accuracy and relevance of the stored information.

B. Content and Knowledge Management

Curating and Updating AI-Related Content

- The platform must continuously curate and update AI-related content to provide users with the most current and relevant information. This includes research papers, case studies, best practices, regulatory guidelines, and ethical standards.
- A dedicated team of experts should be responsible for identifying new developments in AI and ensuring that the platform reflects the latest advancements and insights. This









ongoing curation process helps maintain the platform's relevance and usefulness to its users.

Ensuring Quality and Reliability of Information

- Ensuring the quality and reliability of information is paramount for the Knowledge Platform for AI. All content should be thoroughly vetted and validated by experts in the field to ensure its accuracy and credibility.
- The platform should also implement mechanisms for user feedback and peer review to continuously improve the quality of the information provided. This collaborative approach helps build trust and confidence in the platform's content.

C. Collaboration Tools

Platforms for Knowledge Sharing and Collaboration

- The Knowledge Platform for AI should include robust collaboration tools that facilitate knowledge sharing and cooperation among users. This includes forums, discussion boards, and collaborative workspaces where users can share insights, ask questions, and work together on AI projects.
- These collaboration tools should be designed to support both synchronous and asynchronous communication, allowing users to interact in real-time or at their convenience.

Integration of Communication Tools

- Integrating communication tools into the platform is essential for fostering effective collaboration and engagement. This includes video conferencing, instant messaging, and email integration to provide seamless communication channels for users.
- Additionally, the platform should support integration with external communication and collaboration tools commonly used in the industry, such as Slack, Microsoft Teams, and Google Workspace, to enhance the user experience and facilitate broader collaboration.

IV. Applying the Knowledge Platform to Build AI Systems

A. Framework for AI Development

Guidelines and Best Practices

- The Knowledge Platform for AI provides comprehensive guidelines and best practices for AI development. These guidelines ensure that AI systems are developed ethically, responsibly, and inclusively, adhering to the principles outlined in the Social Contract for the AI Age and the AIWS model.
- Best practices cover various aspects of AI development, including data collection and management, model training and evaluation, deployment, and monitoring. They emphasize transparency, fairness, and accountability throughout the AI lifecycle.











Standardized Processes and Methodologies

- The platform establishes standardized processes and methodologies for AI development, which help streamline the development process and ensure consistency and quality across different AI projects.
- These processes and methodologies include detailed workflows, documentation standards, and quality assurance protocols that guide developers in building robust and reliable AI systems.

B. Case Studies and Applications

AI Assistant - Real-World Examples of AI Systems Built Using the Platform

- The platform features a collection of case studies showcasing real-world applications of AI systems developed using the Knowledge Platform for AI. These case studies highlight the practical implementation of the platform's guidelines and best practices across various industries and domains.
- One prominent example is the development of an AI Assistant. Other examples include AI systems in healthcare, education, finance, and public services, demonstrating how the platform can be applied to address diverse challenges and create meaningful impact.

C. Continuous Improvement

Feedback Loops for Ongoing Enhancement

- The Knowledge Platform for AI incorporates feedback loops to facilitate continuous improvement. Users are encouraged to provide feedback on the platform's guidelines, tools, and resources, which helps identify areas for enhancement.
- Regular reviews and updates ensure that the platform evolves to meet the changing needs of the AI community and remains aligned with the latest advancements in AI technology and ethical standards.

Adapting to Evolving AI Technologies and Trends

- The platform is designed to adapt to evolving AI technologies and trends. It includes mechanisms for monitoring emerging technologies, industry trends, and regulatory changes, ensuring that the platform remains relevant and up-to-date.
- By staying informed about the latest developments in AI, the platform can continuously integrate new methodologies, tools, and best practices, helping users stay ahead in the rapidly evolving field of AI.

V. Ethical Considerations and Governance

A. Ethical AI Principles











Ensuring Fairness, Transparency, and Accountability

- Ensuring fairness involves creating AI systems that treat all individuals equally and do not discriminate against any group. This includes implementing algorithms that are designed to minimize bias and promote inclusivity.
- Transparency in AI development and deployment is crucial for building trust. This involves making AI processes and decisions understandable and accessible to all stakeholders. Transparent practices include open communication about how AI systems are designed, the data they use, and how decisions are made.
- Accountability involves setting clear standards and mechanisms for holding developers, organizations, and AI systems responsible for their actions. This ensures that any negative consequences of AI deployment can be addressed and rectified appropriately.

Addressing Biases and Ethical Dilemmas

- Addressing biases requires identifying and mitigating any prejudices embedded within AI systems. This involves thorough testing and validation processes to detect and correct biases in data and algorithms.
- Ethical dilemmas in AI, such as privacy concerns, surveillance, and the impact on employment, must be addressed through careful consideration and debate. Developing ethical guidelines and frameworks helps navigate these dilemmas, ensuring that AI technologies are used responsibly and ethically.

B. Governance Structures

Establishing Governance Frameworks

- Establishing robust governance frameworks is essential for overseeing the ethical development and deployment of AI. These frameworks should outline the principles, policies, and procedures for managing AI systems within organizations and across industries.
- Governance frameworks should be adaptable to accommodate the rapidly evolving nature of AI technologies. They should include provisions for continuous review and updates based on new insights and technological advancements.

Roles and Responsibilities of Stakeholders

- Clearly defining the roles and responsibilities of all stakeholders involved in AI development and deployment is crucial. This includes developers, data scientists, policymakers, business leaders, and end-users.
- Each stakeholder should have specific responsibilities that align with their expertise and influence, ensuring a coordinated approach to managing ethical considerations and governance in AI.

C. Compliance and Regulation











Adhering to Legal and Regulatory Standards

Compliance with existing legal and regulatory standards is fundamental for ethical AI governance. Organizations must stay informed about relevant laws and regulations in their jurisdictions and ensure that their AI systems adhere to these requirements.

• This includes data protection laws, intellectual property rights, and industry-specific regulations that govern the use of AI technologies.

Implementing Robust Compliance Mechanisms

- Implementing robust compliance mechanisms involves developing and maintaining processes that ensure adherence to ethical standards and regulatory requirements. This includes regular audits, risk assessments, and compliance training for all stakeholders involved in AI projects.
- Organizations should establish internal compliance teams or appoint compliance officers responsible for monitoring and enforcing compliance with ethical guidelines and legal standards. These mechanisms help identify and address potential issues before they escalate, ensuring that AI systems operate within the bounds of established norms and

VI. Solutions

Addressing Technical Issues

- Scalability Solutions: Implementing scalable cloud solutions and leveraging edge computing can help manage the growing data and computational needs of AI systems. Continuous investment in infrastructure upgrades and optimization is essential.
- **Interoperability Standards**: Developing and adopting industry-wide standards for AI interoperability can facilitate smoother integration of diverse technologies. Collaboration among stakeholders is crucial in establishing these standards.
- **Bias Mitigation Techniques**: Employing advanced techniques such as bias detection algorithms, fairness-aware machine learning, and regular audits can help identify and reduce biases in AI systems. Ongoing research and development in this area are necessary to improve these techniques.

Fostering a Culture of Collaboration and Innovation

- **Change Management**: Implementing effective change management strategies can help overcome resistance to adopting new technologies. This includes leadership buy-in, comprehensive training programs, and clear communication of the benefits of the Knowledge Platform.
- **Political Engagement**: Actively engaging with policymakers and regulatory bodies can help navigate political challenges. Advocacy for consistent and supportive AI regulations can create a more stable environment for AI development.
- **Cultural Engagement**: Tailoring engagement strategies to address cultural differences can enhance the acceptance and effectiveness of AI technologies. This includes











respecting local customs and values and involving local stakeholders in the development process.

BGF and AIWS Initiatives

- **Call to Action**: BGF and AIWS call on universities, distinguished scholars, thinkers, innovators, business leaders, policymakers, and decision-makers to contribute to the development of the Knowledge Platform for AI.
- **Collaboration with Top Universities**: BGF will collaborate with top universities to collect and aggregate knowledge based on AIWS standards, for examples to work with GSSD of MIT. This collaborative effort will help build a comprehensive and authoritative knowledge base for AI development and deployment.

VII. Conclusion

A. Summary of Key Points

The Knowledge Platform for AI encompasses a comprehensive range of fields, including:

- **Religions, Beliefs, Faiths**: Integrating ethical perspectives and values from various religions and belief systems to guide AI development.
- **Political Systems**: Introducing political systems that promote democracy, respect for people, by people, and equality of opportunity for all. Understanding the impact of political systems on AI governance and promoting policies that support ethical AI.
- **Economic Systems**: Promoting economic systems that support equality of opportunity for all people, companies, and organizations. Ensuring transparency, fairness, and respect for natural resources in economic models to achieve equitable growth and development.
- **Cultures**: Respecting and incorporating diverse cultural perspectives to create inclusive AI applications.
- Arts: Leveraging AI to enhance creativity and innovation in the arts. Leveraging AI to enhance creativity and innovation in the arts, including classical music from around the world.
- Science: Applying scientific principles and advancements to drive AI research and development.









Appendix A. Call to Action Example

On June 1, 2024, an International Inter-religious Conference was held at the Vatican. Pope Francis delivered a speech to the conferees and shortly thereafter spoke at the G-7 meeting about the responsible development of AI.

Speaking at the Vatican conference, the Boston Global Forum's CEO, Nguyen Anh Tuan called up conference participants, religious leaders, distinguished thinkers, innovators, and companies to join in taking action to create equality of opportunities in AI. Tuan emphasized the crucial role of interfaith and interreligious cooperation in the era of artificial intelligence. He introduced BGF's Knowledge Platform for AI as a vehicle for informing and guiding that cooperation and announced that BGF will have an action plan in place by July 2024. He highlighted BGF's desire to work with organizations and individuals who share its vision.

Appendix B. Boston Global Forum's Social Contract for the AI Age and AI World Society (AIWS) Model

The principles, norms, and values underlying the Knowledge Platform derive from two earlier initiatives of the Boston Global. The full version of the resulting documents can be found on the Boston Global Forum's website (bostonglobalforum.org). Here, in brief, is what they say:

- 1. Social Contract for the AI Age:
- The Social Contract for the AI Age outlines the ethical principles and guidelines that should govern AI development and usage. It emphasizes transparency, accountability, fairness, and respect for human rights. It establishes standards for international relations in the Age of AI.
- The Contract serves as a foundational document for the Knowledge Platform for AI, ensuring that all AI systems are developed and deployed in ways that align with these ethical standards.
- 2. AI World Society (AIWS) Model:
- The AIWS model provides a framework for creating a society where AI enhances human well-being and promotes the social good. It integrates ethical considerations into AI development and emphasizes the role of AI in supporting democratic values and human rights. It serves as a model for new democracy in the Age of AI.
- By adopting the AIWS model, leaders in all sectors of society can ensure that their AI initiatives contribute to a just and equitable society, where the benefits of AI are shared by all.









References

1. Singla A., Sukharevsky A., Yee L., Chui M. & Hall B. (2024). *The state of AI in early 2024: Gen AI adoption spikes and starts to generate value*. McKinsey & Company. https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai#/.

2. Maslej N., Fattorini L., Perrault R., Parli V., Reuel A., Brynjolfsson E., Etchemendy J., Ligett K., Lyons T., Manyika J., Niebles J. C., Shoham Y., Wald R. & Clark J. (2024). *The AI Index 2024 Annual Report*. Stanford Institute for Human-Centered AI. <u>https://aiindex.stanford.edu/wp-content/uploads/2024/05/HAI_AI-Index-Report-2024.pdf</u>.

3. *Empowering Responsible AI Development: The Data Sovereignty - Knowledge Platform for AI.* (2024). Boston Global Forum.

4. The Social Contract for the AI Age: <u>https://bostonglobalforum.org/initiative/aiws-and-the-age-of-global-enlightenment/social-contract-for-the-ai-age/</u>

5.AI World Society: <u>https://bostonglobalforum.org/publication/aiws-pioneering-ai-governance-and-new-democracy/</u>









