World Federation of Engineering Organizations
Fédération Mondiale des Organisations d'Ingénieurs

KEYNOTE ADDRESS

BY

Mr. Navinchandra B. Vasoya

Past President, The Institution of Engineers (India) &

Executive Council Member, World Federation of Engineering Organizations (WFEO)

on

Inter-Civilization Exchanges and Mutual Learning: Innovative Development of Science and Technology

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Your Excellencies,

Distinguished Speakers,

Esteemed Delegates,

And my dear friends round the globe,

It is with deep respect and a sense of shared responsibility that I stand before you today—representing the *World Federation of Engineering Organizations (WFEO)*—at this pivotal Forum on Inter-Civilization Exchanges and Mutual Learning. I bring greetings from WFEO President Mr. Mustafa B. Shehu and from our global community of over 30 million engineers across nearly 100 countries.

This forum convenes at a moment of profound significance. Across centuries, civilizations have progressed not in isolation, but through exchange, dialogue, and mutual learning. Whether it was the Silk Road connecting East and West, or shared scientific discoveries across borders, innovation has always thrived when cultures communicated.

Today, in the 21st century, that same principle must guide our response to one of the most transformative forces in human history—Artificial Intelligence.

AI in the Civilizational Context

Artificial Intelligence is changing the world faster than any prior technological revolution. It powers personalized healthcare, optimizes supply chains, predicts natural disasters, enhances learning environments, and shapes public policy. But amid these breakthroughs, a deeper question emerges:

How will AI impact the fabric of civilizations?

Will it bridge cultures or deepen divides? Will it amplify humanity or erode heritage?

History teaches us that technology is not neutral. It carries the intent of its designers, the ethics of its engineers, and the values of the societies that deploy it.

WFEO: The Global Engineering Voice for Ethics and Equity

The World Federation of Engineering Organizations, founded in 1968 under UNESCO's auspices, represents over 30 million engineers across nearly 100 nations. WFEO serves as the global voice of the engineering profession, promoting innovation that is sustainable, ethical, inclusive, and aligned with the United Nations Sustainable Development Goals (SDGs).

WFEO's Committee on Engineering for Innovative Technologies (CEIT) has published foundational guidance on responsible AI development. Its flagship document, the *"Big Data and AI Principles in Engineering,"* outlines seven guiding principles:

1. Good for humanity and the environment

2. Inclusiveness, fairness, and empowerment

3. Privacy with integrity

4. Transparency

5. Accountability

6. Peace, safety, and security

7. Collaboration across disciplines and cultures

These are not just principles—they are ethical imperatives. They ensure that as engineers and innovators, we remain custodians of both technological excellence and civilizational wisdom.

Generative AI and the Need for Global Governance

In 2024, WFEO released its landmark report on the *"Safety and Global Governance of Generative AI."* The report urges the creation of an inclusive, multilateral framework, ideally under the UN system, to govern how AI is researched, developed, and applied.

WFEO advocates for:

- Global AI safety standards with embedded ethical checks,

- Transparent auditing and explainability in AI systems,

- Equitable access to AI education and innovation tools, especially for developing nations.

Without such frameworks, there is a real risk that AI will reflect only a narrow set of values—leaving behind rich civilizational perspectives that are vital to a balanced and inclusive future.

AI's Impact on Civilizations: A Five-Dimensional Lens

AI is reshaping our world in five interconnected ways:

Cultural Representation

AI systems often underrepresent non-Western languages, histories, and traditions. We must develop multilingual and culturally aware datasets so that civilizational diversity thrives in the digital age.

Ethical Frameworks Rooted in Values

Engineering is not just technical—it is moral. AI must be built upon ethical foundations drawn from plural civilizational perspectives, integrating compassion, justice, and community well-being.

Access and Equity

WFEO emphasizes that AI inclusion is a human right. Through our capacity-building programs like ECBAP (Engineering Capacity Building for Africa Programme), we are enabling developing nations to harness AI in ways that respect their unique cultural and developmental needs.

Inter-Civilizational Learning through AI

AI can serve as a tool to translate knowledge across civilizations, making ancient medical wisdom, traditional climate adaptation methods, and indigenous knowledge accessible to the global community.

Resilience and Sovereignty

Civilizations must build local capacity to develop and govern their own AI systems. Dependence on external platforms without cultural compatibility undermines long-term resilience.

WFEO in Action: Engineering for Humanity

This year alone, WFEO has:

- Hosted the Global AI Symposium 2025 on responsible innovation across sectors,

- Co-led the UN STI Forum session on AI for SDGs, advocating AI for climate action, gender equality, and digital inclusion,

- Trained 300+ engineers in Africa in AI applications across water, agriculture, energy, and infrastructure.

These actions exemplify WFEO's core belief: that technological progress must be co-created by all civilizations, not driven by a few.

A Call for a Global Ethical Compact on AI

Let this forum in Beijing become a turning point. We must work toward a Global Ethical Compact on AI and Emerging Technologies, rooted in:

- Cultural respect,

- Ethical universality,

- Shared governance.

AI must not erase civilizations—it must enrich them.

We envision a future where:

- Algorithms carry stories,

- Data models reflect linguistic diversity,

- And engineering designs echo indigenous wisdom.

Conclusion: Engineering the Civilizations of Tomorrow

As engineers, scientists, and thought leaders, we are not just building tools. We are building the next chapters of civilization.

In the words of Confucius, *"Wisdom, compassion, and courage are the three universally recognized moral qualities of humanity."* Let these qualities guide us as we shape AI—not merely as a smart force, but a wise, compassionate, and culturally inclusive one.

Let us build AI not just with code, but with conscience.

Not just for productivity—but for peace, progress, and plurality.

Not just to innovate—but to interconnect civilizations in deeper understanding.

And as we look ahead, let us remember that the promise of AI is not merely in what it can do—but in who we become as we wield it. In this shared journey of human and technological co-evolution, the role of inter-civilizational empathy, learning, and collaboration becomes paramount. It is not enough for AI to be intelligent; it must also be humane. It must reflect not the dominance of a single worldview, but the harmony of many.

In this regard, platforms like today's forum play an indispensable role. They serve as bridges across borders, fostering mutual understanding, innovation, and collective responsibility.

I would like to extend my heartfelt appreciation to the China Association for Science and Technology (CAST) for their outstanding vision and leadership in organizing this landmark event. CAST, an integral National Member of WFEO from the Asia/Pacific region, continues to be a global torchbearer in promoting dialogue, learning, and inclusive technological advancement. Their commitment to fostering mutual respect and collaboration across civilizations is both timely and inspiring.

Thank you once again for the opportunity to share this space of thought, dialogue, and hope.

Thank you. Xie Xie.