

Pool Strength for Collaborative AI Governance to Drive the Development of the Digital Silk Road



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Foreword

Thousands of years ago, Zhang Qian set off from Chang'an and trod out the world-famous over-land Silk Road, linking different countries and civilizations, and opening the door for exchanges between the East and the West. The Silk Road was not only a trade route, but also an important platform for scientific and technological exchanges between ancient China and the countries along the route, which profoundly contributed to a surge in productivity and the transformation of the mode of production. Today, with the rapid development of the digital economy, artificial intelligence (AI) has brought unprecedented development opportunities to countries and regions along the Digital Silk Road, effectively assisting them in improving production efficiency, enriching people's lifestyles and optimizing governance models. A Digital Silk Road of the 21st century is taking shape at a faster rate, injecting new momentum into the prosperity and development of countries and regions along the route.

Pooling strength from countries along the Digital Silk Road for collaborative AI governance is the cornerstone of healthy AI development, and is vital to promoting the construction of the Digital Silk Road in the new era. However, AI governance along the Digital Silk Road is currently facing systematic challenges common to all countries involved in AI globalization, and real-world problems such as insufficient coordination between governance mechanisms and lack of an inclusive governance landscape have significantly restricted the formation of a collaborative AI governance system. Therefore, there is an urgent need to carry out multi-level international collaboration on AI and deepen bilateral and multilateral cooperation, with a view to generating a solution to collaborative AI governance along the Digital Silk Road.

Looking ahead, in order to effectively cope with the practical challenges facing AI governance, countries along the Digital Silk Road should forge consensus on diversified governance, enhance governance capacity, and promote inclusive development to boost the high-quality development of the Digital Silk Road, all while upholding the principle of "extensive consultation, joint contribution and shared benefits".

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I. The Significance of Pooling Strength for Collaborative AI Governance along the Digital Silk Road

(I) The Digital Silk Road propels digital economy cooperation under the Belt and Road Initiative (BRI)

The Digital Silk Road, which combines digital economy development and the BRI, has become an important focus of Belt and Road cooperation.

During the inaugural Belt and Road Forum for International Cooperation (BRF) in 2017, China proposed that "We should pursue innovation-driven development and intensify cooperation in frontier areas such as digital economy, artificial intelligence, nanotechnology and quantum computing, and advance the development of big data, cloud computing and smart cities so as to turn them into a digital silk road of the 21st century". The proposal received warm support from all countries. By the end of 2022, 17 countries had signed memorandums of understanding (MoU) on cooperation on the Digital Silk Road with China, and 18 countries and regions had inked the Memorandum of Understanding on Strengthening Investment and Cooperation in Digital Economy with China. Through cooperation, all parties have achieved remarkable results in digital infrastructure, digital trade and cross-border e-commerce, and digital governance.

(II) AI creates new development opportunities for the Digital Silk Road

AI technologies are booming, becoming a key driver of global development. At present, as the core driver of the new round of technological revolution, AI is gradually evolving into a "silicon-based agent" that transcends the boundaries of civilizations and integrates human wisdom. It is even regarded as an "intelligent engine" that reshapes the course of human civilization. In particular, the continuous breakthroughs in

and widespread application of generative AI, represented by ChatGPT and DeepSeek, are promoting the transformation of AI from perceptive to cognitive, from analytical and judgmental to generative, and from special-purpose to general-purpose, with new trends such as accelerated breakthroughs and application-driven development. A McKinsey study finds that generative AI could add the equivalent of the United Kingdom's entire GDP annually to the global economy if it could be used effectively in relevant industries.¹

AI is helpful in energizing countries along the Digital Silk Road. As an emerging technology in the new era, AI is highly consistent with the historical positioning of the Silk Road to promote the dissemination of science and technology, and enhance the productivity in the countries along the route. It is empowering the development of countries along the Digital Silk Road on many fronts, including production, life and governance. In terms of production, AI is deeply embedded in the entire chain of R&D and design, manufacturing operations, marketing services, and operations management to accelerate industrial transformation and reshape production and operation; in terms of life, AI helps improve consumer experiences, speed up consumption upgrading, and greatly enriches people's lifestyles; in terms of governance, by accelerating innovation in intelligent decision-making, AI is promoting the shift of social governance from experience-based to data-driven, thus facilitating efficient allocation of social resources and scientific decision-making, and resulting in an increase in governance efficiency.

(III) Pooling strength for collaborative AI governance is vital to promoting the development of the Digital Silk Road

Building synergy for governance is an important lesson drawn from the prosperity of the Silk Road.

The Silk Road connects different countries, civilizations and cultures. It offers a valuable lesson that prosperity and stability necessitate an effective governance system, which could be built by bridging differences, breaking down barriers and fostering consensus. The ancient Silk Road was a cross-civilization exchange network unprecedented in scale in human history, whose governance wisdom profoundly reflects the governance logic of "consultation and co-governance". For example, the Central Plains Dynasty and the states in the Western Regions built consensus on development and protected safety along the trade route through mechanisms such as setting up the Western Regions Frontier Command and sending envoys to each other; at the same time, the Arab Empire and the Roman Empire also strengthened cooperation on governance by establishing related institutions and enacting laws to ensure the smooth running of trade and exchange activities. It is therefore essential to build consensus on cooperation and development by taking into account the demands and concerns of all parties concerned, create an effective co-governance system, and promote the continuous prosperity of the Silk Road amid the integration of diverse cultures.

Building a diversified collaborative AI governance system is a key step toward a thriving Digital Silk Road. Along the Digital Silk Road are vast areas and numerous countries, which vary greatly from each other in terms of institution, resource endowment and development level, and hence find themselves at different stages of AI development with different problems. Therefore, AI governance should seek the broadest common understanding on development among all countries concerned on the basis of respecting differences to better satisfy the diversified development needs of these countries. Through joint participation in AI governance, technological development and application will be more equitable and inclusive, and AI will be more helpful in driving the development of the Digital Silk Road.

II. Realistic Challenges to Collaborative AI Governance along the Digital Silk Road

(I) The urgency of promoting collaborative AI governance among countries along the Digital Silk Road

While driving the transformation of ways of life and production and delivering benefits to the global community, the rapid development and in-depth application of AI technologies have also brought systematic challenges across sectors and regions, such as disinformation communication, data and privacy breaches, shocks to the employment structure, and the widening of the AI divide. These challenges can not only threaten individual rights and interests and social order, but also touch upon the underlying security issues concerning human survival and development. In the face of the multi-faceted challenges brought about by AI technologies, no country can stay unscathed, and it is impossible for a single country or civilization to effectively address the numerous problems at present and in the future. Therefore, there is an urgent need to establish a cross-regional and cross-civilization international cooperation ecosystem.

Especially in the case of the Digital Silk Road, which covers a large number of countries and involves diverse civilizations with a solid foundation for extensive cooperation, it is all the more important to foster synergy for AI governance to address these topical and coming challenges. On the one hand, advantageous resources of various countries can be integrated to build governance synergy; on the other hand, countries may learn from each other. In the long run, such cooperation will help establish a more robust and resilient AI governance system, close the gaps among countries in AI development, promote sustainable AI development in an inclusive manner, and effectively turn the Digital Silk Road's vision of innovation and cooperation into solid development results.

(II) Realistic challenges to building a collaborative AI governance system along the Digital Silk Road

At present, the challenges faced by countries along the Digital Silk Road in the field of AI governance are essentially regional manifestations of common global challenges. These challenges are not unique to a particular region, but are systematic problems common to all countries in the process of AI globalization, which are mainly associated with coordination and inclusiveness:

Insufficient coordination between governance mechanisms. In the process of AI governance, countries along the Digital Silk Road have gradually formed a development landscape of varying principles, approaches and means of governance, resulting in fragmentation featuring scattered issues without central ones. This makes effective coordination difficult. **In terms of governance principles,** countries along the Digital Silk Road show significant differences in the principles of AI governance, based on their objective differences in technological base, governance capacity, and interests and demands. Some countries emphasize promoting the rapid development of AI technologies by prioritizing innovation; while others pay more attention to risk prevention and control to ensure the security and reliability of technologies. **In terms of the emphasis of governance approaches,** countries along the Digital Silk Road show certain differences in governance approaches. Some countries rely mainly on flexible governance means such as policy guidance and industry self-discipline, while others focus on rigid ones like laws and regulations and administrative supervision. These uncoordinated governance mechanisms makes it difficult for countries along the Digital Silk Road to build synergy for AI governance, which in turn affects the integrity and effectiveness of AI risk response.

Lack of an inclusive governance landscape. Countries along the Digital Silk Road have large population bases and diverse application scenarios, and their governance demands should have become an important component of the global governance system. In the

process of building an AI governance system, developing and developed countries share the responsibilities, but the structural gaps between the two in technology R&D capacity, digital infrastructure and reserve of talents have led to insufficient participation and influence of developing countries in governance agenda setting, rule making and mechanism operation. A UN report titled "Governing AI for Humanity" shows that most developing countries are passively exposed to technological risks without having a say, and their representation and say in AI governance are not enough; looking at the seven non-UN global AI governance initiatives, only seven countries are parties to all of them, whereas most of the developing countries are parties to none, in which countries along the Digital Silk Road are underrepresented. The current less inclusive governance landscape cannot meet the realistic needs of countries along the Digital Silk Road, partly impeding the establishment of an inclusive global governance system.²

III. Ways of Building a Collaborative AI Governance System along the Digital Silk Road

(I) Bilateral cooperation lays a foundation for broader collaborative governance

Bilateral cooperation provides a platform for direct exchanges and cooperation between two countries. It can help them enhance mutual trust and establish a long-term and stable collaborative AI governance mechanism, thus laying a foundation for cooperation on broader collaborative governance. Currently, countries along the Digital Silk Road have conducted a series of useful bilateral cooperation explorations on AI governance, setting good examples. In May 2025, for example, relevant Chinese and Brazilian departments inked an MoU on Deepening Cooperation in Artificial Intelligence. Under the MoU, the two sides will strengthen

cooperation in AI development and governance, especially in addressing AI risks, training professionals, and training large language models and multimodal systems, promote academic and technological exchanges, and deliver the benefits of AI technologies to the two peoples.

(II) Multilateral cooperation can help foster synergy for collaborative governance within organizations

Multilateral cooperation among organizations can integrate the resources of member countries, promote the formation of a collective force among member states, facilitate the formulation of governance plans within the organization, and promote them globally, gradually building a globally recognized AI governance framework. Countries along the Digital Silk Road are actively exploring paths to achieve AI governance through multilateral cooperation. For example, in November 2023, Indonesia, Italy, Kenya, China, and other Digital Silk Road countries actively participated in the first Global AI Safety Summit and jointly signed the "Bletchley Declaration" with relevant countries, initially forming a consensus in the international community on AI governance; in February 2025, at the AI Action Summit held in Paris, 60 countries and international organizations, including Brazil, South Africa, and China, signed a joint statement, prioritizing international coordinated governance. China attaches great importance to multilateral cooperation in AI governance and is committed to sharing digital opportunities with Digital Silk Road countries. Through multilateral mechanisms such as the BRICS cooperation mechanism, China-ASEAN cooperation, and the Shanghai Cooperation Organization, AI is incorporated into the cooperation framework to promote the formation of AI governance. For instance, in October 2024, China and ASEAN issued the "Joint Statement on Promoting the Establishment of a Sustainable and Inclusive Digital Ecosystem", proposing to "promote the exchange and communication of AI norms, development, security, and governance best practices".

(III) Cooperation under the UN framework can help generate a global collaborative governance solution

As the most universal, authoritative, and representative intergovernmental international organization, the UN plays a core role in global governance and can effectively support multilateral communication and collaboration among countries in the field of AI governance, promoting the construction of a global AI governance plan. In 2017, the UN Secretary-General's report explicitly included AI in global governance issues for the first time; in 2019, UNESCO initiated the development of the world's first "Recommendations on Ethics of AI" and officially adopted it in November 2021; in October 2023, the UN established a high-level AI advisory body, providing AI governance advice to the international community through close communication among all stakeholders and coordinating global AI development. At the same time, the UN actively supports the Digital Silk Road Initiative. In April 2024, at the World Internet Conference Digital Silk Road Development Forum, UN Under-Secretary-General Li Junhua stated that as an important part of the "Belt and Road Initiative", the Digital Silk Road has played a significant role in enhancing digital connectivity and community capacity building, bridging the "digital divide", and promoting sustainable development. China supports the UN playing a significant role in global AI governance, actively promoting the AI governance process and cooperation within the UN framework, and deeply participating in discussions on AI ethics and the formulation of technical standards at UNESCO, the International Telecommunication Union, and the International Organization for Standardization. China also vigorously promotes the UN's strengthening of international cooperation on AI capacity building. On July 1, 2024, at the 78th UN General Assembly, the resolution proposed by China on strengthening international cooperation on AI capacity building was unanimously adopted. The resolution

advocates an open, fair, and non-discriminatory market environment, supports the UN's central role in coordinating international AI cooperation, and encourages international cooperation and practical actions to help countries, especially developing countries, enhance their AI capabilities. This move will contribute to the development of AI in the countries along the Digital Silk Road.³ In July 2024, the ITU of the UN released the "AI for Good: Case Studies on Innovation and Impact Expansion", which includes 53 selected cases from around the world, with 21 cases contributed by China. The case proposed by China Mobile, "Addressing the Global Aging Challenge: AI Travel Model Assists in Searching for Missing Elderly", was selected.

IV. Future Prospects for Promoting Collaborative AI Governance along the Digital Silk Road

Looking ahead, in the face of rapid technological iteration and global risks and challenges, AI governance along the Digital Silk Road should, under the framework of the Belt and Road Initiative, adhere to the principle of "extensive consultation, joint contribution and shared benefits", actively build an open, fair, and effective governance mechanism, and promote the joint governance of AI among Digital Silk Road countries to a new stage.

Deepen the "extensive consultation" mechanism of the Digital Silk Road and consolidate multi-stakeholder governance consensus. First, strengthen the core role of the UN. Better leverage the UN's leading role in global AI joint governance, build a platform for communication and collaboration on AI for all countries, and promote the formation of a more comprehensive and representative AI joint governance framework for Digital Silk Road countries. **Second, promote the synergy of multilateral mechanisms.** Encourage multilateral organizations such as APEC, BRICS, SCO, and G20 to deepen AI governance coordination within their organizations,

enhance dialogue among various governance mechanisms and the connection with the Digital Silk Road Initiative, avoid governance fragmentation, and jointly form governance synergy. **Third, encourage the joint participation of all stakeholders.** Actively leverage the important roles of various stakeholders such as government departments, private sectors, technical organizations, and civil society groups in Digital Silk Road countries in the design of governance mechanisms, formulation of technical standards, and construction of ethical norms. Establish an international communication platform and consultation mechanism involving multiple stakeholders to promote the formation of governance solutions with broader consensus.

Expand the "joint construction" path of the Digital Silk Road and enhance governance capacity. First, jointly promote high-quality industrial development. Promote collaborative research and wide application of AI technologies among Digital Silk Road countries, actively participate in the formulation of international AI rules and standards, and build a globally compatible and mutually recognized governance system. Encourage technological innovation and knowledge sharing, promote and replicate cooperation models such as the China-ASEAN AI Innovation Cooperation Center and the China-BRICS AI Development and Cooperation Center, jointly expand the market space for AI applications, and promote the healthy and sustainable development of the AI industry. **Second, jointly build a solid security foundation.** Adhere to the common, comprehensive, cooperative, and sustainable security concept, promote the formulation of widely agreed AI security guidelines and norms for the Digital Silk Road, share policies and practices on AI testing, evaluation, certification, and supervision, promote the exchange of security governance wisdom among Digital Silk Road countries, and jointly build a solid defense line against AI security risks.

To implement the "shared benefits" goal of the Digital Silk Road and promote inclusive and beneficial development, we should: First, deepen infrastructure sharing. We should promote the joint

05 ³ Lang Ping. Progress, Challenges and China's Role in Global AI Governance [J]. Contemporary World, 2025, (05): 16-22.

construction and sharing of cross-border optical cables, intelligent data centers, edge computing nodes and other infrastructure, optimize the allocation and utilization of computing power resources, and actively promote the interconnection and intercommunication of digital infrastructure, so that countries along the Digital Silk Road can share the development dividends of digital infrastructure and better support the development of artificial intelligence. **Second, promote technology sharing.** We should continuously reduce the cost of technology use by building an open-source technology ecosystem. We should cultivate artificial intelligence talents through joint laboratories and technology training centers, and promote the application of artificial intelligence technology in industries such as healthcare, education and agriculture in Central Asia, ASEAN and Africa, so that countries along the Digital Silk Road can share the development dividends of artificial intelligence technology. **Third, promote data sharing.** We should improve the cross-border data circulation mechanism and promote the safe and legal sharing of data among countries along the Digital Silk Road through multilateral and bilateral cooperation, and help build a multilingual corpus for countries along the Digital Silk Road to fully release and widely share the value of data.

Introduction to China Mobile Research Institute (CMTT)

China Mobile Research Institute (CMRI), the core R&D institution within China Mobile's technological innovation system, positions itself as "a world-class innovation engine in information service technologies" while fulfilling its dual role as a national strategic technology powerhouse and corporate innovation leader.

CMRI has actively undertaken over 200 state-funded national key S&T projects, including major national innovation platforms such as the "Next Generation Mobile ICT National Engineering Research Center" and the "National New Generation AI Open Innovation Platform for Intelligent Networks". CMRI has played a pivotal role in China's mobile communication evolution through "1G initiation, 2G catch-up, 3G breakthroughs, 4G parallel development, and 5G leadership". Its pioneering computing-power network concept has gained national strategic recognition, while leading advancements in optical communication technologies. It has established the Jiutian AI Innovation Zone, launching foundational and industry-specific large AI models, positioning itself as the national AI leader among central SOEs. Its digital-intelligent capabilities have been widely deployed across network operations, marketing systems, and management architectures. CMRI has received 7 Special Prizes for National Scientific and Technological Progress Award and 213 provincial/ministerial awards.

In March 2023, China Mobile established the CMTT with its Research Institute as the core entity, aiming to provide policy decision-making support in digital economy for national and governmental entities, facilitate industrial digital transformation, and support corporate high-quality development. Rooted in the information industry, CMTT leverages China Mobile's technological, market, industrial, and data advantages to consolidate cross-sector research capabilities in the digital economy. Committed to professional research methodologies, specialized analytical perspectives, and evidence-based policy recommendations, it systematically enhances the academic rigor and authoritative stature of policy-oriented studies. Furthermore, it amplifies research impact through strengthened credibility, public trust, and dissemination efficacy, providing intellectual empowerment for high-quality development of the digital economy.

