

Artificial Intelligence as Promoting Effect on International Economic Relations

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Abstract: Artificial intelligence is one of the most cutting-edge fields in today's era, which is triggering a systematic transformation in human production and life worldwide, and has a great impact on international economic relations. In the short term, this disruptive technology will lead to changes and upgrades in industrial structure, a decrease in production costs, changes in international cooperation methods, resource allocation, and a redistribution of economic relations. In the long run, this metaphysical phenomenon based on human will challenge human self-awareness and identity. Different countries and social groups' predictions of the disruptive progress of artificial intelligence will lead to fierce competition and will reconstruct the international economic landscape on this basis.

Keywords: AI; International Economic Relations; The Belt and Road

1. Introduction

Although the discussion and research on artificial intelligence in the international community presents more philosophical speculation, it is evident that this field of modern science has been favored by major research institutes around the world in a short period of time[1]. Since the launch of products such as CHATGPT and SORA, artificial intelligence has shifted more from scientific research to the behavior of governments and businesses. International economic cooperation, including the joint construction of the "the Belt and Road", is warmly embracing AI. In 2016, two days after AlphaGo defeated the South Korean Go World Champion Li Shishi, the South Korean government decided to invest 1 trillion won in five years to support AI research. In general, the development speed of AI is amazing, and it has unprecedented leverage on human economic

activities in terms of strength and scale, It has become one of the most important forces shaping future international economic relations[2].

2. Artificial Intelligence Requires the Development of the Digital Economy to Provide Infrastructure for It

Artificial intelligence simulates human intelligence technology, which requires autonomous learning, decision-making, and execution in fields such as robotics, autonomous driving, speech recognition, and image recognition. Its characteristics of intelligence, autonomy, and self-learning require a huge data repository as support. The digital economy creates value and promotes economic growth through digital technology, including fields such as e-commerce, mobile payments, social media, cloud computing, big data, and the Internet of Things. Its characteristics of informatization, networking, intelligence, and service-oriented can provide a huge database for the development of artificial intelligence, and offer great possibilities for the evolution and development of artificial intelligence.

The digital economy provides a technological foundation and market demand for the development of intelligent innovation and artificial intelligence. Intelligent innovation and artificial intelligence provide new growth points and competitive advantages for the development of the digital economy. It can be said that the development and application of AI need to be based on the creation and continuous enrichment of big data. As the infrastructure of AI, big data has made very extensive development and progress in the process of co building the "the Belt and Road".

In recent years, the data shows that China has actively carried out digital cooperation with co construction countries within the framework of the "the Belt and Road" initiative. In 2017,

China and several developing countries jointly launched the "the Belt and Road" Initiative for International Cooperation in the Digital Economy, which defined the principles and areas of cooperation. In 2019, China signed a memorandum of understanding with 16 countries, including Saudi Arabia and Türkiye, to jointly build the "Digital Silk Road", focusing on cooperation in human resources training, technology transfer and regulation construction. In the same year, China also jointly formulated the "Digital Silk Road" construction plan with 12 countries including Serbia and the Czech Republic. As of the end of 2022, China has signed memorandums of understanding on cooperation on the Digital Silk Road with 17 countries, memorandums of understanding on e-commerce cooperation with 30 countries, and memorandums of understanding on strengthening investment cooperation in the digital economy with 18 countries and regions.

At the same time, the comprehensive strength of digital economy of countries jointly building the "the Belt and Road" has been significantly improved, and this progress has been clearly reflected in their industrial and information development index (show as Table 1). The industry and informatization development index of the countries jointly building the "the Belt and Road" shows that from 2015 to 2022, almost all countries have significantly improved their industry and informatization, Singapore is far ahead, emerging countries such as Türkiye, Albania, India have shown a strong momentum of development, and Mongolia, Egypt, Northern Macedonia and other countries have more room for development. This also shows that in the context of the "Digital Silk Road", the comprehensive strength of the digital economy of the countries jointly building the "the Belt and Road" is constantly improving[3].

Table 1. Comparison of Industrial and Information Development Indexes of Countries Jointly Building the "the Belt and Road" in 2015 and 2022.

Country	2015	2022	Country	2015	2022	Country	2015	2022
Singapore	172.78	220.66	Philippines	44.77	110.78	Indonesia	46.49	73.8
Türkiye	62.89	161.54	Cambodia	29.85	104.48	Jordan	49.03	70.89
Albania	40.18	160.69	Saudi Arabia	90.84	100.79	Ukraine	43.23	69.33
India	54.17	138.17	Russia	61.16	96.98	Armenia	39.32	66.38
Estonia	71.9	136.97	Malaysia	74.23	95.99	Thailand	60.91	60.91
Poland	75.31	134.65	Romania	58.78	92.21	Georgia	40.58	60.47
Lithuania	68.0	131.81	Pakistan	31.35	92.00	Azerbaijan	48.31	57.87
Hungary	63.35	129.50	Kazakhstan	58.61	92.00	Kyrgyzstan	29.51	50.65
Slovenia	78.42	124.26	Czech Republic	90.12	91.82	Moldova	37.04	40.16
Bangladesh	30.89	115.02	Latvia	64.60	90.73	North Macedonia	42.49	36.80
Bulgaria	52.92	112.83	Slovakia	68.91	90.66	Egypt	36.51	36.64
Croatia	54.72	112.26	Sri Lanka	41.03	80.20	Mongolia	41.96	14.55
Serbia	45.94	112.02						

Data source: "The Belt and Road" National Industrial and Information Development Index Report and "the Belt and Road" Industrial and Information Development Index Report (2022) "issued by Huaxin Research Institute.

3. Artificial Intelligence Shining Brightly and Synchronizing with the Reshaping of the Global Economic Landscape

Klaus Schwab, the author of the Fourth Industrial Revolution, believes that the emergence of disruptive technologies in technological and industrial revolution will bring about significant social changes. He deeply demonstrated the technological and social changes, including artificial intelligence, in several areas of discussion, including "From Industry 4.0 to the Fourth Industrial Revolution",

"Unprecedented Social Change", and "Looking Forward to 2025! Deep Change"[4].

3.1 The Rise of Artificial Intelligence in the Global Economy Has Triggered a Reshaping of Industrial Structure

The promotion and application of artificial intelligence in countries along the "the Belt and Road" has led to the rapid penetration and transformation of traditional industries by artificial intelligence technology, thus improving production efficiency and quality. For example, in the manufacturing industry, the application of

intelligent robots makes production lines more efficient and precise, significantly reducing costs. In the financial field, the emergence of artificial intelligence risk control systems and intelligent investment advisors has made investment decisions more rational and scientific. These changes not only drive the upgrading of the entire industrial chain, but also redefine the economic status of various countries and regions on a global scale. Many countries, including India, Japan and South Korea, have also implemented a certain degree of digital independence. Their engineers, domestic enterprises, market depth, payment systems, network security tools and other elements can maintain the self-development of domestic technology departments and provide a full range of Internet services.

3.2 Artificial Intelligence Plays a Crucial Role in Global Trade

With the widespread application of artificial intelligence technology, the ways and models of global trade are undergoing profound changes. The rapid development of artificial intelligence technology has made cross-border e-commerce more convenient and efficient, greatly reducing trade barriers and transaction costs. The promotion and application of AI in countries along the "the Belt and Road" will provide new opportunities for economic cooperation among countries. By jointly building artificial intelligence infrastructure and technology research and development centers, countries along the route can share technological resources, strengthen economic cooperation, and achieve a mutually beneficial situation. Countries such as China, India, and Vietnam have gained dual benefits by attracting more foreign investment, improving intelligence levels, computer programming, backend research and development, and medical X-ray consultations to serve exporting countries. This has not only attracted investment but also enhanced exports. The cost of capital for technology companies is also rapidly decreasing.

3.3 Artificial Intelligence Has Brought Tremendous Impact and Opportunities to the Global Labor Market

With the widespread application of automation and intelligent technology, some traditional labor-intensive industries will inevitably face substitution and adjustment. In this process, on

the one hand, it will cause a loss of some labor force, but on the other hand, it will also give rise to new employment opportunities and new job demands. For example, in the field of artificial intelligence, a large number of professional talents are needed to engage in algorithm development, data analysis, and intelligent system maintenance. Under the framework of the "the Belt and Road", countries can jointly carry out talent training plans, academic exchanges and other activities, promote talent cooperation and training, and improve the overall talent level in the field of artificial intelligence.

3.4 Artificial Intelligence has not only Brought Tremendous Breakthroughs in the Field of Technology, but is also Reshaping the Global Economic Landscape

Its rise has prompted the restructuring of industrial structure, changes in trade methods, adjustments in the labor market, and sustainable economic development. Therefore, we should fully recognize the importance and influence of artificial intelligence, strengthen international cooperation, and jointly promote the development of artificial intelligence, in order to achieve common prosperity and sustainable development of artificial intelligence and the global economic landscape[5].

4. Artificial Intelligence Leads a New Round of Industrial Transformation

4.1 Artificial Intelligence Is Profoundly Changing the Operation and Business Models of Various Industries

With the rapid development of technology and the continuous expansion of application scenarios, artificial intelligence is profoundly changing the operating methods and business models of various industries. Jointly build the "the Belt and Road" countries. Under the framework of the cooperation initiative, vigorously promote the application of new infrastructure such as 5G, cloud computing, artificial intelligence, Internet of Vehicles, and industrial Internet in traditional industries, help countries in their digital transformation process, and achieve complementary resource advantages.

Artificial intelligence can provide more efficient, accurate, and automated solutions through technologies such as big data analysis, pattern

recognition, and machine learning. In the manufacturing industry, artificial intelligence is widely used in production process optimization, quality control, supply chain management, and other aspects, improving production efficiency and product quality. In the financial industry, artificial intelligence can provide more accurate investment advice and risk management through data analysis and risk prediction. In the field of healthcare, artificial intelligence can assist doctors in disease diagnosis, drug development, and personalized treatment, improving the efficiency of medical resource utilization and the effectiveness of disease treatment. In the field of transportation, artificial intelligence can be applied to intelligent driving, traffic congestion prediction, path planning, and other aspects to improve traffic safety and efficiency. Artificial intelligence is also playing an important role in many fields such as education, retail, and agriculture, bringing more opportunities and challenges to various industries. It can be said that artificial intelligence is becoming a new engine for promoting social and economic development, leading a new round of industrial transformation.

4.2 Jointly Building "The Belt and Road" Initiative Plays a Major Role in AI Reshaping the World Economic Landscape

The the Belt and Road Initiative is a major economic cooperation initiative proposed by China, which aims to promote trade, investment and infrastructure construction among participating countries. As a key technology field, AI also plays an important role in the "the Belt and Road" initiative and helps to reshape the world economic landscape. Artificial intelligence technology can enhance the productivity and competitiveness of participating countries. By applying artificial intelligence technology in infrastructure

construction, such as intelligent transportation, smart grids, and intelligent manufacturing, efficiency can be improved, costs can be reduced, and economic development can be promoted. Artificial intelligence has broad application prospects in cross-border trade and logistics. Artificial intelligence technology can optimize supply chain management, intelligently predict market demand, improve customs clearance efficiency, etc., thereby promoting smooth trade and logistics efficiency. Artificial intelligence can also bring more opportunities to participating countries in fields such as education, healthcare, and finance. By promoting the deep integration of artificial intelligence technology with these fields, it is possible to improve the sharing of educational resources, the level of medical and health services, and financial inclusiveness. Jointly building the "the Belt and Road" initiative to promote the development of artificial intelligence will help promote the transformation and upgrading of participating countries' economies, enhance their development potential, and optimize the economic structure. Through the application of artificial intelligence technology, the world economic landscape can be reshaped, achieving more intelligent, efficient, and sustainable development.

Artificial intelligence is a strategic technology that leads the future. Major countries in the world have regarded the development of artificial intelligence as a major strategy to enhance national competitiveness and maintain national security. They are accelerating the formulation of plans and policies, and strengthening deployment around core technologies, top talents, standards and norms, striving to take the lead in the new round of international scientific and technological competition (As shown in Table 2).

Table 2. Major Countries in the World Regard Development of Artificial Intelligence as a Major Strategic Comparison to Enhance National Competitiveness and Maintain National Security.

National	Year and Theme	Goals or Practices
Canada	2017: Pan-Canadian Artificial Intelligence Strategy	Increase the number of artificial intelligence researchers and graduates; Establish three world-class scientific research clusters; Cultivate ideological leaders who understand the economic, moral, policy, and legal implications of artificial intelligence; Support national research groups focused on artificial intelligence.
China	2017: Development Plan for the New Generation of Artificial Intelligence	By 2030, China's artificial intelligence theory, technology, and application will reach the world's leading level, becoming a major innovation center for artificial intelligence in the world.

Japan	2017: Artificial Intelligence Technology Strategy	The Artificial Intelligence Technology Strategy Committee has been established to develop the Research and Development Goals and the Roadmap for Artificial Intelligence Industrialization, which includes new investments in research and development, talent, public data, and startups.
Britain	2018: AI Sector Deal	Promote government and company research and development, STEM education investment, enhance digital infrastructure, increase AI talent, and lead global digital ethical exchanges.
EU	2018: EU Artificial Intelligence	Seven conditions that "trustworthy" artificial intelligence should meet have been proposed, and the trial implementation of AI ethical standards will be initiated, inviting industry, research institutions, and government agencies to test and supplement the standards.
Korea	2016: Starting two days after AlphaGo defeated South Korean Go world champion Lee Sedol with artificial intelligence technology	Invest 1 trillion Korean won in the next five years to support AI research; Two years later, the South Korean government announced a new five-year plan, planning to invest 2.2 trillion Korean won to strengthen the country's AI research and development.
India	2018: National Artificial Intelligence Strategy	Focusing on the five major areas of health care, agriculture, education, smart cities, and infrastructure and intelligent transportation, with a focus on how India can use AI to promote economic growth and social inclusion.
Germany	2018: Key points of the federal government's artificial intelligence strategy	Provide funding for research and innovation transformation in key areas related to artificial intelligence; Prioritize increasing economic benefits for German experts in the field of artificial intelligence; The cooperation with France to build an artificial intelligence competitiveness center should be completed as soon as possible and achieve interconnectivity; Establish a competitive center for professional categories; Strengthen the construction of artificial intelligence infrastructure, etc.
United States	2019: The American Artificial Intelligence Initiative	Increase investment in artificial intelligence research and development, open up artificial intelligence resources, set artificial intelligence governance standards, cultivate artificial intelligence workforce, participate internationally and protect the advantages of artificial intelligence in the United States.

Information source: Website of the Chinese Academy of Social Sciences.

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