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RESEARCH ON THE IMPACT OF DIGITAL TRANSFORMATION ON CHINA-BELARUS CROSS-BORDER ENTREPRENEURSHIP AND INNOVATION COOPERATION PATHS

This study explores the impact of digital transformation on entrepreneurial innovation cooperation paths on the China-Belarus border and provides optimization suggestions, reveals the key factors in entrepreneurial cooperation in the digital era, and provides reference for cross-border cooperation.

Keywords: *digital transformation, China-Belarus cross-border cooperation, Entrepreneurship and innovation, Technology integration*

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ИССЛЕДОВАНИЕ ВЛИЯНИЯ ЦИФРОВОЙ ТРАНСФОРМАЦИИ НА ПУТИ КИТАЙСКО-БЕЛОРУССКОГО ТРАНСГРАНИЧНОГО ПРЕДПРИНИМАТЕЛЬСТВА И ИННОВАЦИОННОГО СОТРУДНИЧЕСТВА

В этом исследовании изучается влияние цифровой трансформации на пути предпринимательского инновационного сотрудничества на китайско-белорусской границе, приводятся предложения по оптимизации, раскрываются ключевые факторы предпринимательского сотрудничества в цифровую эпоху, а также даются рекомендации по трансграничному сотрудничеству.

Ключевые слова: *цифровая трансформация, китайско-белорусское приграничное сотрудничество, предпринимательство и инновации, интеграция технологий*

Digital transformation has become a major trend in global economic development and has had an inevitable impact on various industries, companies and countries. In the China-Belarus customs border area, entrepreneurship and innovation cooperation is an important part of bilateral economic cooperation. The impact of transformation on the path of entrepreneurial innovation cooperation on the China-Belarus border needs to be fully studied. This study aims to explore the impact of digital transformation on entrepreneurial innovation cooperation paths on the China-Belarus border. First, through in-depth research on the application of digital technology in cross-border cooperation, the impact of digital transformation on cooperation models, processes and efficiency can be revealed, thereby providing new ideas and methods for cooperation between both parties. Secondly, research on the impact of the entrepreneurial innovation cooperation path on the China-Belarus border can help both parties better understand the impact mechanism of digital transformation trends on bilateral cooperation, and is conducive to promoting in-depth exchanges, cooperation and win-win between the two parties.

In addition, by analyzing the impact of digital transformation on the entrepreneurial innovation cooperation path of China-Belarus Customs, we can reveal the problems and challenges in the cooperation process, provide government departments and enterprises of the two countries with suggestions for improving cooperation methods and optimizing cooperation strategies, and further promote China-Belarus Customs. regional economic cooperation. Finally, this study combines grounded cases

and data analysis to explore the specific impact of digital transformation on the entrepreneurial innovation cooperation path between China and Belarus from a systematic and comprehensive research perspective, providing useful reference and inspiration for the academic and practical circles, and promoting China-Belarus cooperation. The further deepening and development of Belarusian bilateral cooperative relations. Therefore, the conduct of this research has important theoretical and practical significance. It will provide new understanding and ideas for China-Belarus border entrepreneurship and innovation cooperation, promote the closer and more efficient development of the cooperative relationship between the two parties in the digital era, and promote economic and social development. Develop sustainable development.

Theoretical basis of digital transformation on entrepreneurship and innovation cooperation. Digital transformation refers to the use of digital technology and information technology by organizations or enterprises to comprehensively transform business processes, products and services to adapt to the requirements of the digital era. Among them, the concept of digital transformation includes data-driven, customized applications, cross-border integration, etc. Its main characteristics are reflected in the centralized management and utilization of data, the widespread application of intelligent technology, and integration innovation between different fields. Digital transformation aims to improve efficiency, reduce costs, enhance competitiveness, bring a more flexible, agile and innovative development model to enterprises, and promote continuous growth and sustainable development.

Belarus and China have a consistent and dynamic cooperation space in the field of entrepreneurship and innovation. The key paths are analyzed as follows: First, strategic cooperation is one of the key paths to create innovative cooperation. Both parties can jointly plan cooperation goals, resource integration and market expansion strategies. Secondly, technical exchanges are an important way to strengthen bilateral innovation cooperation. By holding technical seminars and initiating joint research and development projects, we will promote the sharing and transformation of technological achievements, promote cooperation and development in the field of scientific and technological innovation, and complete in-depth cooperation in artificial intelligence, biotechnology and other fields. At the same time, talent cultivation is also a key path. The two parties can strengthen talent exchanges and training, build cross-cultural and cross-field teams, jointly tap talent potential, and promote the in-depth development of innovative practices of both parties, especially the training and introduction of talents in high-end fields, to inject more advantages into both companies. Finally, market path expansion is the key to innovative cooperation between both parties. Jointly explore the international market, cooperate to promote innovative products and services, use the "Belt and Road" initiative and other platforms to strengthen trade exchanges and investment cooperation, promote jointly leading the vigorous development of innovative industries, and frequently cooperate in the fields of digital economy, intelligent manufacturing and other fields. It said that Belarus and China should closely combine multiple paths in entrepreneurship and innovation cooperation, give full play to their respective advantages, promote win-win cooperation, and jointly promote the continuous and in-depth development of innovation cooperation relations.

Analysis on the Current Situation of Entrepreneurship and Innovation Cooperation on the China-Belarus Border. As an important intersection connecting Central Asia and Eastern Europe, the China-Belarus border area provides abundant opportunities and potential for entrepreneurship and innovation cooperation. The cooperation themes expanded by both parties in border areas include scientific and technological exchanges, talent training, industrial collaboration and other fields. In recent years, the China-Belarus border area has supported a number of innovative enterprises and export companies, and promoted the construction of cross-border incubators, science and technology parks and other innovation platforms. These platforms not only promote cooperation and exchanges between entrepreneurs from both sides, but also provide strong support for the integration

and sharing of innovative resources. For example, due to geographical advantages, border areas have become important channels for commodity trade from Central Asia to Eastern Europe. Cooperation between the two parties in areas such as logistics and cross-border e-commerce has obvious geographical advantages. In terms of technological innovation, both parties actively participate in joint research and development projects and accelerate the transformation and application of technological achievements. At the same time, the two countries also jointly promote cooperation in biotechnology, clean energy and other fields, and have broad prospects in the fields of environmental protection and sustainable development. In addition, with the rapid development of digital technology, innovative cooperation on the China-Belarus border has given rise to new development opportunities. The popularization of digital tools and platforms makes information sharing more efficient and promotes deeper cooperation between the two parties. For example, through big data analysis and artificial intelligence technology, both parties can jointly explore market demand, formulate effective marketing strategies, and achieve customized production, thereby improving product competitiveness.

Overall, China-Belarus border entrepreneurship and innovation cooperation has initially established a cooperation framework, promoted the integration and sharing of innovative resources between the two sides, and injected new vitality into promoting economic cooperation and development between the two sides. As cooperation continues to deepen and expand, China-Belarus border innovative cooperation will show more eye-catching cooperation prospects and help both parties jointly achieve innovative development goals. In order to further enhance the feasibility of cooperation, the two sides can strengthen policy communication and coordination, encourage technological innovation and talent cultivation, and strengthen intellectual property protection to provide stronger support for the sustainable development of China-Belarus border innovation and entrepreneurship cooperation.

At the same time, digital transformation has had a profound impact on China-Belarus cross-border entrepreneurship and innovation cooperation. First of all, the rapid development of digital technology makes information sharing more convenient and efficient, promoting cooperation and exchanges between the two parties. Through digital tools such as the Internet and smartphones, entrepreneurs in the China-Belarus border areas can achieve instant communication and remote collaboration, promoting the efficient advancement of cooperation projects. Secondly, digital transformation has given rise to new business models and innovation areas, bringing broader opportunities for cross-border innovation cooperation. For example, based on big data analysis and artificial intelligence technology, both parties can explore market demand, optimize product design, and improve production efficiency and market competitiveness. At the same time, digital technology has also promoted the development of cross-border e-commerce, cross-border payment and other fields, providing more business expansion channels for Chinese and Belarus entrepreneurs. In the context of digital transformation, China-Belarus cross-border innovation cooperation is facing new challenges and opportunities. On the one hand, digital transformation requires entrepreneurs to continuously improve their technical level and information capabilities to adapt to rapidly changing market needs. On the other hand, digital technology provides more possibilities for innovative cooperation between China and Belarus, such as jointly developing intelligent logistics systems and building digital marketing platforms. Therefore, China and Belarus should strengthen cooperation, jointly explore the application of digital technology in the field of cross-border innovation, and formulate corresponding policies to support the development of innovation and entrepreneurship.

Overall, digital transformation has injected new vitality and impetus into China-Belarus cross-border entrepreneurship and innovation cooperation. Both parties should make full use of the convenience and opportunities brought by digital technology, strengthen cooperation and exchanges, and jointly respond to various challenges brought about by digital transformation. By deepening cooperation and promoting technology sharing and innovation resource integration, China-Belarus cross-border innovation cooperation will usher in more prosperous and sustainable development.

The impact of digital transformation on cross-border entrepreneurship and innovation cooperation between China and Belarus. Technology-driven changes in cooperation models. In the transformation of cooperation models driven by technology, digital transformation has had a profound impact on China-Belarus cross-border entrepreneurship and innovation cooperation. In terms of virtual team cooperation, through digital technology, entrepreneurs from China and Belarus can establish virtual teams to achieve remote collaboration, use video conferencing, online chat tools and shared document platforms to communicate without geographical restrictions, and promote talent cooperation on a global scale. As for the open innovation platform, it advocates Chinese and Belarusian innovators to actively participate in online communities, share resources, ideas and experiences, stimulate more innovative ideas and project cooperation, and promote cross-border cooperation between innovators in different industries. In terms of flexible project management, the application of digital technology enables Chinese and Belarus entrepreneurs to make instant decisions, quickly discuss problems and make decisions through online project management tools, and adopt flexible project management methods such as agile development for rapid iteration and continuous optimization to improve the success rate. These changes have made China-Belarus cross-border entrepreneurship and innovation cooperation more flexible, efficient and global, and promoted the in-depth and successful development of cross-border cooperation.

1) Digital platform restructures collaboration processes

The open innovation platform promotes the sharing of resources, knowledge and innovation results among all parties through an open, interconnected and collaborative approach, thereby promoting innovative development. In the context of digital transformation, cross-border entrepreneurship and innovation cooperation between China and Belarus is of great significance. Among them, online community sharing allows Chinese and Belarusian innovators to actively participate in professional forums and industry social platforms, share experiences, resources and ideas, obtain global feedback, expand their horizons and find partners. Resource sharing and collaboration provide opportunities to share resources, helping entrepreneurs quickly obtain the resources they need, reduce costs, and accelerate project advancement. Cross-border cooperation promotes cross-border cooperation between innovators in different industries. It is easier to find partners on the open platform, bringing about collisions of ideas and more cooperation opportunities. Incubation and acceleration services include mentor guidance, investment matching and other support, and are customized to help entrepreneurs overcome challenges and achieve rapid and sustainable development. In summary, the open innovation platform provides broader cooperation space and opportunities for cross-border entrepreneurship and innovation cooperation between China and Belarus. Through resource sharing, cross-border cooperation and incubation acceleration services, it promotes in-depth cooperation and common development and stimulates more innovation vitality. Promote the development of innovation and entrepreneurship cooperation between the two parties.

2) Data-driven collaborative decision-making optimization

Data-driven optimization of cooperative decision-making refers to the use of big data analysis and artificial intelligence technology to provide more reliable data support for cooperative decision-making between China and Belarus in the context of digital transformation. This method can help both parties understand market demand, product positioning and competitive environment more comprehensively and accurately, thereby optimizing cooperation strategies, reducing risks and improving success rates. Specifically speaking, in data-driven cooperation decision-making, China and Belarus can achieve optimization in the following ways: First, with the help of big data analysis, both parties can deeply mine market data, identify market trends and changes, adjust cooperation strategies in a timely manner, and predict the future. development trends and formulate cooperation plans accordingly. Secondly, artificial intelligence technology is used to analyze behavioral user data to understand in-depth user needs and preferences, so as to adjust product design and marketing strategies and

improve the market appeal and competitiveness of products. In addition, use big data to analyze competitor data to understand their strategic initiatives and market performance, conduct competitive intelligence analysis, and formulate differentiated strategies based on competitor data. Finally, use data analysis technology to evaluate and predict potential risks and formulate corresponding risk strategies. Management strategies, real-time monitoring of project progress and risk situations, and timely measures to avoid the impact of risks on cooperation. Through data-driven cooperation decision-making optimization, China and Belarus can formulate cooperation plans more scientifically and in-depth, and improve the accuracy and efficiency of decision-making. At the same time, cooperative decision-making supported by data can also increase the transparency and credibility of cooperation, laying a solid foundation for the construction and development of cooperative relations between the two parties.

Influencing factors and path optimization. In terms of the influencing factors and path optimization of digital transformation on cross-border entrepreneurship and innovation cooperation between China and Belarus, the following key factors need to be considered. First, in terms of technology integration, the challenges faced by technology integration between different countries and enterprises can be highlighted, such as differences in technical standards between different countries, interoperability issues of their respective systems, and the complexity of cross-border data transmission. These problems need to be solved by developing unified technical standards and protocols to promote technology integration in cross-border cooperation to achieve information sharing and resource integration. Secondly, regarding data privacy and security issues, we can further explain the differences between data protection laws and regulations in different countries, and how to establish a data privacy protection mechanism that complies with multi-national standards to ensure data security. At the same time, you can also emphasize the importance of encryption technology and rights management in protecting data security. In addition, in terms of cultural differences, we can explore the differences in cooperation models, communication methods and decision-making habits between different countries, as well as how to enhance cultural integration and establish consensus and understanding between multinational companies through cultural exchanges, training and cross-cultural exchange activities, so as to Promote closer and more efficient cooperative relationships.

In summary, the above measures will help deal with the factors that influence digital transformation on cross-border entrepreneurship and innovation cooperation between China and Belarus, and provide specific suggestions for path optimization to promote the development of cooperative relations in a more in-depth and lasting direction.

Regarding the factors that influence digital transformation on cross-border entrepreneurship and innovation cooperation between China and Belarus, the following suggestions can be used to optimize the path to promote the in-depth and lasting development of the cooperative relationship. First of all, it is recommended to establish a special transnational cooperation mechanism to promote technology integration and information sharing among cross-border enterprises, and to coordinate the interests of all parties by setting up joint working groups or committees to promote the smooth progress of cooperation projects. Secondly, we advocate strengthening data privacy protection awareness and training to ensure strict compliance with local laws, regulations and standards during transnational data transfer. At the same time, transnational data privacy protection guidelines are formulated to adapt to the data security requirements of different countries and ensure data security. In addition, more cultural exchange activities, such as transnational cultural salons and theme seminars, are encouraged to help companies understand and respect the cultural habits and values of different countries, thereby enhancing trust and willingness to cooperate among partners and promoting cultural integration. It is recommended to establish a regular communication mechanism to ensure smooth flow of information and smooth cooperation between multinational enterprises. Use video conferencing, online platforms and other methods to regularly share project progress, problem feedback and

cooperation planning to improve cooperation efficiency and quality. Finally, it is recommended to establish a continuous evaluation mechanism to regularly evaluate cooperation projects and collect feedback, identify problems in a timely manner and take improvement measures. By continuously optimizing the cooperation path, we can achieve the sustainable development and optimization of the cooperative relationship and promote the cooperative relationship to develop in a deeper and more lasting direction. These path optimization suggestions will help effectively deal with the factors that influence digital transformation on China-Belarus cross-border entrepreneurship and innovation cooperation.

Conclusion. Digital transformation has a profound and subsequent impact on China-Belarus border entrepreneurship and innovation cooperation. From a theoretical perspective, digital transformation has brought new opportunities and challenges to entrepreneurial innovation cooperation, driving fundamental changes in cooperation models, processes and decision-making methods. Through the application of digital technology, both parties can achieve information sharing, resource integration and market development more efficiently, thereby gaining greater competitive advantages in cross-border cooperation. However, an analysis of the current status of entrepreneurship and innovation cooperation on the China-Belarus border shows that although digital transformation has played a role in this field, it still faces certain gaps and challenges. In practical applications, technology-driven changes in cooperation models mean that both parties need to adapt to new cooperation paradigms and working methods. The reconstruction of cooperation processes by digital platforms makes cooperation closer and more efficient, and the optimization of cooperation decisions driven by data is Focus on using big data analysis and artificial intelligence technology to provide more reliable data support for collaborative decision-making. Therefore, digital transformation has brought new opportunities to China-Belarus cross-border entrepreneurship and innovation cooperation. At the same time, it also requires both parties to work together to overcome challenges and promote the development of cooperative relations in a deeper and more lasting direction. In this process, efforts to adapt to new technologies, strengthen the construction of cooperation platforms, and deepen data-driven decision-making will become key factors in promoting China-Belarus cross-border entrepreneurship and innovation cooperation.

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