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Retraction

Retracted: Research on the Influence of Economic Globalization on International Relations in the Background of Big Data and Internet of Things

Wireless Communications and Mobile Computing

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their

agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] F. Li, T. Li, and L. Liu, "Research on the Influence of Economic Globalization on International Relations in the Background of Big Data and Internet of Things," *Wireless Communications and Mobile Computing*, vol. 2022, Article ID 8773395, 10 pages, 2022.

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Research Article

Research on the Influence of Economic Globalization on International Relations in the Background of Big Data and Internet of Things

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Under the current background of the continuous development of big data and Internet of Things technology, the ability to collect and process data has become one of the core competitiveness of the country. A good information management model can help the country obtain more information resources and take the lead in the competition of national power. More opportunities to get more benefits. At the same time, economic globalization is no longer just a concept. Countries have become global economic villages, and the relations between countries have undergone tremendous changes in the context of technological and economic globalization. Research on the impact of changes in relations between countries can enable us to formulate effective diplomatic strategies to defend territory and sovereignty. At the same time, it can also allow us to recognize the current international situation and understand the laws of social development as a whole. Economic globalization has become more realistic in the current era of the Internet of Everything, and it has become an unchangeable form of development. Big data has changed the development model of the economy and various industries and has also added new forecasting tools to the development of international relations. International relations have also become closer in this context, and international culture, politics, and economy are almost integrated into a whole. This paper first analyzes the basic concepts of big data, the Internet of Things, economic globalization, and international relations and then describes the profound impact of economic globalization on international relations under the background of big data and the Internet of Things from the perspectives of culture, politics, and economy, using the method of online questionnaire survey to interview the diplomatic staff of different countries and using the statistical analysis method to analyze the obtained questionnaire data, and finally obtain the background of big data and the Internet of Things and the different effects of economic globalization on international relations effect of direction. The contribution of this paper is to provide innovative solutions to promote the development of relations between countries in the context of big data and the Internet of Things.

1. Introduction

1.1. Big Data. The arrival of the era of big data has revolutionized the industrial structure of society. Compared to the past, society value relies more on the overall use of information [1]. The essence of big data is the aggregation of complex data. Its basic mode of operation is the collection and processing of information. Of course, the way big data technology collects and processes information is different

from general data processing technology [2]. The data collected through big data technology can be organized into valuable information in the hands of professionals, and the analysis and organization of the collected data can also greatly improve the decision-making ability of managers [3]. The role of big data in organizational management, decision-making, and operation determines its practical value, and this value will continue to deepen and innovate. Its impact on organizational management has also become a

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symbol of the era of big data [4]. The development trend of Gartner's statistical big data in the next five years is shown in Figure 1 [5].

As can be seen from Figure 1, the utilization rate and market share of big data technology will gradually increase in the next five years and will reach its peak in 2027, that is, big data technology will occupy 80% of the market in the data processing field in 2027, compared with the actual market in 2023. The market share is only 10%, which shows that big data will develop rapidly in the next few years.

Big data, as the name suggests, is a collection of massive information [6]. The information that constitutes big data is different from conventional data information, mainly because the amount of information has reached the level of ZB, and this information can continuously generate new information, so that the entire big data technology exists in a dynamic way [7].

Big data is generally a large-scale collection of data that cannot be captured and processed by conventional means. The way to deal with big data should use more skills, through skills to find efficient processes to deal with orders of magnitude, rapid growth, and complex patterns of information. The importance of big data lies mainly in its professional way of analyzing and mining data, discovering connections between information materials, and predicting the future [8]. At present, it is widely used in the application of big data in education, business, science, and other fields, which is conducive to the rapid development of education, economy, and society.

The minimum computing level of big data can reach 1000 * TB = PB level, which shows the large amount of data. Big data is a huge amount of information material. Another way of saying it is the data that cannot be captured, managed, and processed within a specified time by using general software tools. Processing, this model has more powerful decision-making, insight, and process optimization capabilities. At the same time, big data has a high growth rate. Its characteristics are reflected in many aspects: the amount of data is huge, and the number of sources and channels are simultaneous; there are many types of data; the speed of flow is faster than the speed of acquiring data information; the information density is relatively low, and the various information data in big data may not have value; we must mine its value through corresponding methods [9].

1.2. Internet of Things. The IoT industry occupies the hardware equipment market year by year with an annual application growth rate of more than 20%. In the future, with the gradual development of the Internet of Things, it will definitely attract the attention of people in various fields. The growth of its market share in recent years is shown in Figure 2 [10].

As can be seen from Figure 2, the distribution rate of IoT devices will increase from 10% in 2023 to 90% in 2030 in the next seven years. And after 2025, its growth rate will be close to a straight line, that is to say, there will be more and more demand for IoT devices in various industries in the future.

In terms of economic benefits, with the further improvement of the technology and reaching the standard of engineering practice application, it can replace the traditional information transmission method and save more than 100 million yuan in costs for the global hardware system [11]. Under the data distribution framework based on traditional manpower and low-intelligence hardware [12], each country invests hundreds of millions of dollars in hardware information forwarding, and the IoT device information distribution scheme combined with big data can be developed in the future. The value of the software system brought to various industries in various countries will exceed 10 billion [13].

In terms of social benefits, taking the Internet of Vehicles, a submodule of the Internet of Things as an example, the application of the Internet of Vehicles has effectively improved the security level and collaborative sharing capabilities of the automotive system. At present, there are frequent information leakage incidents in the automotive system, and the source of information leakage is it is the car [14]. In the future era of autonomous driving, if hackers can intercept the data of autonomous vehicles and tamper with the forwarding, they will be able to threaten the personal safety of vehicle passengers. After the application of the Internet of Vehicles technology, its natural data sharing and the protection performance can avoid the possibility of information leakage and critical errors, thereby avoiding the occurrence of security incidents [15]. It can be seen that in the future, this technology will further promote the deep integration of communication, transportation, and automobile industries and promote the rapid development of Internet of Vehicles technology. Further extended to other fields, the Internet of Things can have a huge impact on global hardware and equipment, and perhaps in the near future, the global hardware items can be interconnected [16].

1.3. The Significance of Big Data and the Internet of Things for International Relations. National interest is the main reason affecting international relations, and it also includes the classification of national economic, political, and security interests. At present, with the continuous development of information technology, a large number of applications such as mobile Internet and cloud computing in social life, big data is gradually penetrated into all aspects of society [17]. In the Internet era, the rapid development of Internet+, big data, and cloud computing technologies has achieved deep integration with the information management of various countries, resulting in a series of changes in production and operation, information management, and financial information processing in various countries [18]. The national management model has been replaced by the new model of Internet + information management. In the context of the era of big data and the Internet of Things, economic globalization poses a severe test to the traditional coping model of relations between countries [19]. The traditional way of dealing with the relationship between countries can no longer handle the increasingly huge business data between countries. Under the fierce market competition and the pressure of internal and external environment, if the relationship between countries is to achieve the expected degree of harmony, it is necessary to carry out reforms in the way of responding to the relationship between countries. In

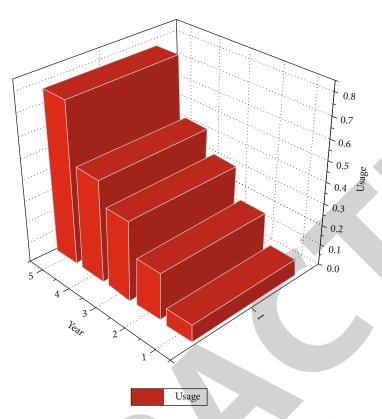


FIGURE 1: The utilization rate of big data technology in the next five years.

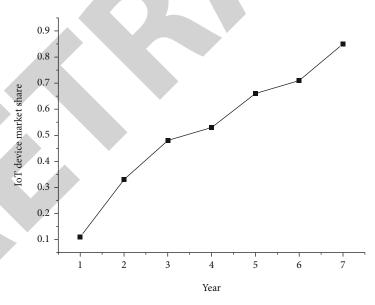


FIGURE 2: Changes in the market share of IoT devices in recent years.

the traditional relationship management between countries, the process is often very complicated and cumbersome, such as economic management, cultural resource management, and political management in the relationship management of countries, and these processes need to go through several procedures [20]. Because of the whole process, the process requires a lot of data analysis, which is very inefficient, and because of the complex relationship between them, the

methods of statistics and query are different, and there will be the problem of repeated transmission of information [21]. Therefore, the process must realize the participation of big data tools [22]. The report of the 19th National Congress of the Communist Party of China pointed out that innovation is the first driving force for development and the strategic support for building a modern economic system [22, 23].

Table 1: The influence of economic globalization on international cultural relations.

Serial number	Number of people	Influence
1	199	Positive
2	55	Unified mode
3	179	Cultural diversity
4	65	Negative

Big data and the Internet of Things environment are changing people's cognition and way of life. In the future, the relationship between countries will continue to rely on new concepts and new technologies, combined with the advantages and characteristics of relevant national research institutions [24]. Conduct research on organization and management, association and discovery, analysis and visualization, etc. [25]. Explore the potential development prospects and benefits of big data and the Internet of Things, and study the collaborative innovation of big data and the Internet of Things, scientific research model changes, service models, and industry. It has laid a solid foundation for the sustainable, stable, and coordinated development of the economy, politics, and culture of various countries [26]. The relationship information management model of countries under the new form has many characteristics that traditional management models do not have. The integration of political management, cultural information management, etc. into the relationship information management of countries is beneficial to the relationship information management of countries and can be more comprehensive, scientific, and proactive to give full play to the decisionmaking role of big data and Internet of Things technology [27] and effectively play a role in the harmonious development of relations between countries in the form of economic globalization [28].

2. In the Context of Big Data and the Internet of Things, the Impact of Economic Globalization on International Cultural Relations

2.1. Questionnaire Survey. International culture is reflected in three different dimensions, including material culture, institutional culture, and value culture. Culture embodies the character, way of thinking, and values of the nation [29].

Big data plays an extremely important role in socioeconomic and cultural development. The information security of big data is related to the security of people's personal data and important government and enterprise information. The various high-quality characteristics of big data make it widely used in all walks of life [30, 31]. And effectively improve the speed and accuracy of information retrieval for organizations and individuals. Some existing risk assessment technologies based on big data are based on the grey prediction theory, which has certain guarantees for the security risk assessment of big data databases. At present, there is a certain emphasis on the defense of big data security risks,

TABLE 2: Reliability and validity analysis.

	Reliability	Validity
Value	Alpha = 0.82	KMO = 0.69

and corresponding measures are taken to maintain information security.

In order to understand the impact of economic globalization on international cultural relations in the context of big data and IOT, this paper distributed online questionnaires to 500 citizens from 10 countries in different continents in the East and the West. The specific impact is shown in Table 1.

The occupations of the 500 respondents were doctors, nurses, teachers, business executives, workers, government officials, scientists, and businessmen.

The parameters corresponding to reliability and validity can be calculated according to professional reliability and validity theory. The specific reliability and validity compliance can be determined based on the comparison of the standard value of the parameter with the actual calculated value.

199 surveyed citizens believe that economic globalization has positively affected international cultural relations, 55 people believe that global material culture has gradually developed into a unified model, and 179 people believe that value culture has become more abundant under economic globalization. Another 65 samples believe that in the context of big data and the Internet of Things, cultural globalization have led to a variety of adverse effects, such as the increasingly serious international network security problems, and security incidents such as hackers attacking companies in other countries to extort virtual currency.

2.2. Data Analysis. Through the analysis and test of the reliability and validity of the questionnaire in this paper, it is found that the reliability and validity of the questionnaire in this paper meet the range specified in the scientific theory, and the specific values are shown in Table 2 below.

In addition, after further analysis and comparison of the data collected by the questionnaire, it was found that there was a big difference in the feedback information received by the elderly over the age of 80 and the young people under the age of 30, because most of the elderly over the age of 80 have experienced the entire process of cultural globalization, and young people under the age of 30 happened to be born in the process of cultural globalization, using the classification algorithm formula to distinguish two different types of samples; the specific formulas are shown in

$$P(x|y_{i})P(y_{i}) = P(a_{1}|y_{i})P(a_{2}|y_{i}) \cdots P(a_{m}|y_{i})P(y_{i})$$

$$= P(y_{i}) \prod_{j=1}^{m} P(a_{j}|y_{i}),$$
(1a)

$$\underbrace{\min_{\alpha}}_{1} \frac{1}{2} \sum_{i=1}^{m} \sum_{j=1}^{m} \alpha_{i} \alpha_{j} y_{i} y_{j} (x_{i} \times x_{j}) - \sum_{i=1}^{m} \alpha_{i}. \tag{1b}$$

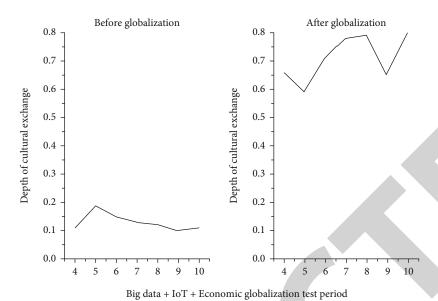


FIGURE 3: Economic globalization and the depth of international cultural exchanges.

In (1a), x and y correspond to two different types of samples, respectively. In (1b), a_i and a_j correspond to a prediction point, respectively.

By studying the questionnaire responses of the elderly, it is found that this type of sample shows the impact on international culture before and after economic globalization under the background of big data and the Internet of Things, as shown in Figure 3.

Figure 3 shows that before economic globalization, cultural exchanges were in a closed state, but after economic globalization, the depth of cultural exchanges has increased significantly, and international cultures have also tended to integrate. As can be seen from Figure 3, in the context of combining big data and the Internet of Things, the depth of international exchanges before economic globalization was poor, but after globalization, the depth of international exchanges has increased significantly, and even the starting point has directly increased by 5 times.

2.3. Innovation Strategy. In the era of big data and the Internet of Things, it is more convenient to conduct international exchanges online, and the degree of information occlusion has decreased significantly. The application of computer technology advances has also promoted in-depth exchanges between different countries in many aspects; in influence, international culture should pay more attention to information security. Through the introduction of software or R&D technology, an international information exchange platform based on big data is built with the help of the Internet. In the era of big data, the technology of information fusion applied to international exchanges can not only help countries better organize data and information but also greatly reduce workload and pressure and can use the security network information technology corresponding to big data to prevent the risk of information leakage. To ensure that the data exchanged between friends of various countries can be stored and transmitted more securely, the leakage of key data of cultural exchanges can be effectively avoided. The arrival of the era of big data is both an opportunity and a challenge to traditional international cultural exchanges. Opportunities mean that traditional international cultural exchanges are upgraded with the support of big data technology. This challenge also means that the old model of international cultural exchange cannot put the country in an advantageous position. In the era of big data, the most important thing is the ability to collect and organize information. Mining useful information from users' information and analyzing users' consumption data will also increase the understanding of the market situation among friends from all over the world, to make corresponding cultural exchange strategy adjustments.

In order for cultural globalization to proceed smoothly, it is necessary to abandon the sense of cultural superiority and reduce obstacles to international exchanges, such as relaxing the restrictions on network access barriers between national borders, and at the same time attach importance to the protection of international network attacks to ensure the healthy development of international cultural exchanges.

3. The Impact of Economic Globalization on International Economic Relations in the Context of Big Data and the Internet of Things

3.1. Questionnaire Survey. International economic relations refer to the cooperation and trade relations formed by international trade, investment, and financial activities between international economies. In order to understand the impact of economic globalization on international economic relations in the context of big data and the Internet of Things, this paper distributed online questionnaires to 1,000 citizens of different developed countries in Europe, Africa, and Asia. Multifaceted effects are shown in Table 3.

Table 3: The influence of economic globalization on international economic relations.

Serial number	Number of people	Influence
1	331	Multipolar
2	248	Fierce competition
3	199	Rich and poor gap widens
4	222	Standardization

The parameters corresponding to reliability and validity can be calculated according to professional reliability and validity theory. The specific reliability and validity compliance can be determined based on the comparison of the standard value of the parameter with the actual calculated value.

From Table 3, it can be seen that 331 surveyed citizen samples believe that economic globalization has made international economic relations develop towards multipolarization, 248 samples believe that global economic competition has become more intense, and the pattern of economic superpowers also exists, while in 199, one sample believes that the gap between the rich and the poor is gradually widening between developed and underdeveloped countries in economic globalization, and another 222 samples believe that the international economy is gradually forming a whole, and the economies of other countries will also be impacted after the superpower economic crisis occurs. Most of the surveyed citizens believe that in the context of big data and the Internet of Things, economic globalization has led to various adverse effects. For example, in the past two years, Bitcoin has skyrocketed, which has led to the involvement of multinational companies in the mining industry, which has greatly depleted the world's energy. At the same time, the soaring and plummeting of virtual currency has also led to economic instability, money laundering activities have become increasingly rampant, and economic bubbles have gradually increased. The epidemic is also easy to achieve globalization, which is very different from the year when the Black Death only spread in Europe.

3.2. Data Analysis. Through the reliability and validity analysis and test of the questionnaire in this paper, it is found that the reliability and validity of the questionnaire in this paper meet the scope specified in the scientific theory, and the specific values are shown in Table 4 below.

In addition, after further analysis and comparison of the data collected by the questionnaire, the economic analysis of various countries before and after economic globalization uses the *Q*-learning algorithm formula in machine learning to analyze and process the correlation degree of the data. The specific formulas are shown in

$$Q_{t+1}^{*}(s, a) = \mathbb{E}_{s' \in p(s'|s, a)} \left[r_{t+1} + \gamma \max_{a'} Q_{t}^{*}(s', a') \right], \quad (1c)$$

$$\nabla_{\theta_{i}} L(\theta_{i}) = \mathbb{E}_{s,a,r} \left[\left(r + \gamma \max_{a'} Q(s', a'; \theta_{i}^{-}) - Q(s, a; \theta_{i}) \right) \nabla_{\theta_{i}} Q(s, a; \theta_{i}) \right].$$

$$(1d)$$

TABLE 4: Reliability and validity analysis.

	Reliability	Validity
Value	Alpha = 0.79	KMO = 0.86

The results of the questionnaire were further visualized, and it was found that before and after economic globalization, changes in the dependencies of international economic relations are shown in Figure 4.

Figure 4 shows that when big data and Internet of Things technologies are popularized and economic globalization has not started, countries have a relatively high degree of economic independence. After economic globalization, the degree of dependence on economic relations among countries gradually increases, and the degree of correlation is also higher.

3.3. Innovation Strategy. The era of big data not only brings people the convenience of information management in global trade but also changes the model of global economic relations from the traditional one to the one demanded by the times. The traditional model of international economic relations lacks online communication and relies too much on long-term voyages or offline meetings for decisionmaking after traveling. Especially in the ever-changing market economy environment, the lagging trade information data will greatly affect the economic benefits of various countries. With the full development of big data and the Internet of Things, countries can obtain financial information and data in a timely manner with the help of information technology, which greatly improves efficiency. At the same time, countries can also use information technology to understand and update market information in a timely manner and improve their competitiveness in the market. The development of effective information management is inseparable from a sound system. Under the current external environment, countries must optimize and improve traditional information management systems in combination with big data. The first is to speed up data construction, including the construction of information collection systems, standardize market information data collection methods in various countries, clarify specific collection paths, further improve the deep correlation between the collected national economic information data and industry development, and provide basic information for information management. The second is to speed up the standardization construction system, strictly regulate the economic information management of various countries, ensure the symmetry and sharing of economic information management in various countries, and strengthen multiparty exchanges and cooperation with internal departments; in addition, it is possible to consider establishing a confidentiality system to strengthen the economic information of various countries. Management awareness and security precautions strengthen the protection of economic information security in various countries through the technological advantages of big data, such as the establishment of a system security access mechanism and an information security evaluation mechanism.

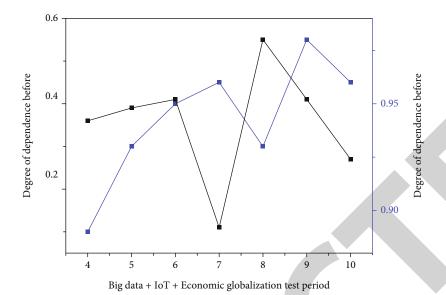


FIGURE 4: Economic globalization and intercountry economic dependence changes.

Table 5: Reliability and validity analysis.

	Reliability	Validity
Value	Alpha = 0.92	KMO = 0.83

4. In the Context of Big Data and the Internet of Things, the Impact of Economic Globalization on International Political Relations

4.1. Questionnaire Survey. The essence of international relations is the expansion of national interests, and international political relations are the key point and the core point that affects the relations between countries. During the operation of the big data network, one of the factors that endangers and affects the international political security is the big data virus. Once a virus invades a big data system, it may infect a large number of other nodes in the system and replicate continuously, causing the damaged modules to fail to return to normal. When the big data network information system is attacked by viruses, it is mainly manifested in three aspects: first, the virus is highly concealed. Once the virus successfully invades the big data platform, it will be activated immediately, and some viruses will hide after intrusion, and then, at a specific time, operations, which are not detected in time, causing the big data network to fall into a dangerous state. Secondly, the virus is very destructive. After the virus invades the big data platform, it will spread to the entire big data system and cause certain damage. Once the relevant file programs are destroyed, it will make the system difficult to start and run normally. Finally, the big data virus is extremely contagious. It ignores any restrictions and directly infects the files in the big data. Even if it is operated by the antivirus processing software, it is still difficult to ensure complete removal and even causes the files to be erased and destroyed. Viruses will still replicate and infect themselves in big data network systems, resulting in information security risks in the development of big data.

Combining the background of big data and the Internet of Things, this paper conducts a survey on 60 staff of foreign ministries from 20 countries. The main survey questions are related to the impact of economic globalization on international political relations. Views on the impact of globalization on international political relations vary. Seven of them believe that in the context of big data and the Internet of Things, the role of ideology in international relations is not important, while 14 people believe that democratization plays a more important role in international political relations. Increasingly, 22 people believe that the concept of national sovereignty is changing, and 17 people believe that economic relations are the basis for determining political relations. Most of the surveyed citizens believe that the international political situation has changed from one superpower to one that is gradually evenly matched during World War II, and the international situation under economic globalization will be more severe in the future.

4.2. Data Analysis. Through the reliability and validity analysis test of the international political questionnaire, it is found that the reliability and validity of the questionnaire in this paper meet the scope specified in the scientific theory, and the specific values are shown in Table 5.

Statistical data is analyzed by a probability formula, as shown in

$$\lim_{n \to \infty} \frac{1}{n} \sum_{n=1}^{\infty} p(X_n = s_i | X_0 = s_i) = \frac{1}{\mathbb{E}(s_i)} = \pi(s_i).$$
 (1e)

In formula (1e), n represents the number of samples, and p() represents the conditional probability, where s represents different situations. The results of the questionnaire are further visualized, and it is found that the changes in

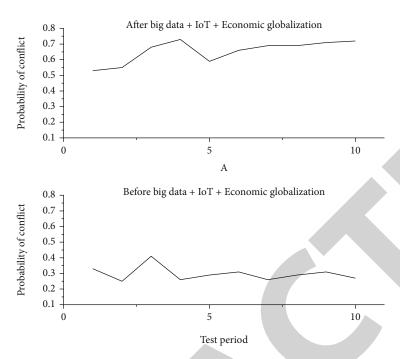


FIGURE 5: Economic globalization and the probability of conflict between countries changes.

international political relations before and after economic globalization are shown in Figure 5.

Figure 5 shows that when big data and Internet of Things technologies are popularized and economic globalization has not started, the probability of political conflicts between countries is high. After economic globalization, political relations between countries gradually ease, and the probability of maintaining peace is also higher.

From the display in Figure 5, it can be seen that under the background of big data and Internet of Things technology, international conflicts will generate more variables after the deepening of economic globalization.

4.3. Innovation Strategy. Big data has given birth to the analysis needs of political data in various countries. The Internet of Things has made the electronic devices of various countries more closely connected. The politics of various countries is the main point in this change, and the information management model of international political relations is the core element of the change. In this era, international political relations must change traditional thinking, attach importance to the application of big data technology, and apply the management thinking of big data to practice; the traditional international political relations response mode is gradually falling behind, and "extensive" management is turning to "refinement." The megatrend of management change is irreversible. Big data technology helps countries collect key political information, analyze and filter it, and ultimately promote the transformation of international political relations toward "refinement" through this valuable information, that is, in order to better adapt to the environment of the big data era, international political relations must accelerate optimization and innovation from the traditional management model to the needs of the new era. The international political information management model in

the era of big data can also be optimized in terms of innovation and decision-making. From the perspective of innovation, international political relations can realize innovation on the basis of huge data. Big data itself hides "sensory functions." Countries define problems through big data analysis and then judge some innovative behaviors through data. The reform plan decision-making for a certain problem can also be realized through big data. When analyzing international political relations, the analysis plan can also be input into the big data platform for comparative analysis, and then combined with relevant data information to evaluate the decision, and finally decide whether to implement it according to the effective reference suggestions.

The impact of the era of big data on the information management model of international political relations is multifaceted. Affected by this, the management of international political relations should focus on innovating and optimizing information management models, accelerating the formulation and improvement of information management systems applicable to the era of big data, and innovating information security management models for international political relations in the context of big data. At the same time, pay attention to the construction of international political relations information management talents, timely change the management mode concept, and provide more training and learning opportunities for international political relations information management talents to support the healthy development of international political relations information management.

5. Conclusion

The impact of economic globalization on international relations is important information for countries to make operational decisions. Traditional changes in international relations are mainly based on changes in military and economic activities, and information about changes is obtained through processing by participating countries. Under the background of big data and the Internet of Things, the collection of information plays a significant role in predicting the form of the country and the future development trend of the country. The analysis of the impact of international relations under the background of big data should get rid of the limitations of traditional political and economic research concepts, adopt a variety of research models and methods, and optimize the report information of the impact results of international relations by combining qualitative and quantitative methods, charts, and texts, etc.

In this paper, by dividing the types of impact of economic globalization on international relations under the background of big data and the Internet of Things, and sorting out the degree of impact on international relations, this paper analyzes the common problems faced by the impact of international relations in the current era of big data, including international culture, changes in relations, changes in international economic relations, and changes in international political relations, and other specific issues, and finally gives innovative solutions to promote the development of relations between countries in the context of big data and the Internet of Things.

Data Availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

References

- [1] F. Tao, W. Hui, Y. Chaofeng, D. Aili, B. Daoyu, and L. Danfeng, "Application of big data in intelligent classification and classification of overdue mail," *Postal Research*, vol. 38, no. 1, pp. 33–37, 2022.
- [2] W. Lien and Y. Jingnan, "Big data-driven precise management of government performance: analysis of motivation, realistic challenges and future approaches," *Theoretical Discussion*, vol. 1, pp. 86–93, 2022.
- [3] S. Fanfan, "The impact of university scientific research funding performance and audit thinking in the era of big data," *Friends of Accounting*, vol. 3, pp. 92–97, 2022.
- [4] X. Yan, "Design and implementation of distribution network monitoring APP with data center as the core," *Computer Age*, vol. 1, pp. 40-41+45, 2022.
- [5] C. Hangyu, Y. Xin, and L. Zijiang, "Research status and trend of big data technology based on bibliometrics," *Industry and Technology Forum*, vol. 21, no. 2, pp. 57-58, 2022.
- [6] L. Xian, "Research on the application of big data technology in equipment manufacturing industry," *Internal combustion engine and accessories*, vol. 2, pp. 197–199, 2022.

- [7] Y. Gou, R. Maohai, and X. Ming, "Research on operation reliability of distribution network based on big data technology," *China Equipment Engineering*, vol. 1, pp. 232-233, 2022.
- [8] W. Shuai and T. Weigang, "Discussion on the application of big data in the financing process of technology-based SMEs," *Financial Technology Times*, vol. 30, no. 1, pp. 53–58, 2022.
- [9] T. Tian, "Application of mathematical model technology in agricultural big data analysis," *China Fruit Tree*, vol. 1, p. 111, 2022.
- [10] H. Yating, R. Xuyang, C. Yishui, Z. Jiale, and L. Jian, "Design and implementation of quinoa growth cycle management system based on Internet of Things," *Internet of Things Technol*ogy, vol. 12, no. 1, pp. 51–54, 2022.
- [11] C. Ruizhi, "Development of a smart farm greenhouse system based on Internet of Things technology," *Internet of Things Technology*, vol. 12, no. 1, pp. 112–114, 2022.
- [12] W. Jianbao, "Application of Internet of Things technology in power industry," *Science and Technology Innovation and Application*, vol. 12, no. 2, pp. 174–176, 2022.
- [13] M. Shaoqu and Z. Wansheng, "Research on application of multi-function driving recorder based on Internet of Things technology," *Times Auto*, vol. 1, pp. 21–23, 2022.
- [14] L. Mengting and X. Liang, "Design of cold chain transportation management information system based on Internet of Things," *Software Engineering*, vol. 25, no. 1, pp. 59–62, 2022.
- [15] C. Huaming, "Analysis on the design and application of power distribution Internet of Things," *Electronics World*, vol. 24, pp. 33-34, 2021.
- [16] W. Wenqi, "The application of blockchain-enabled IoT technology in the context of smart agriculture," Shanxi Agricultural Economics, vol. 24, pp. 161-162+168, 2021.
- [17] Z. Jizheng, Z. Puning, S. Fulei, C. Lu, and Z. Dong, "Design of dairy cow rumen pH and temperature monitoring system based on IoT technology," *Journal of Agricultural Machinery*, vol. 22, pp. 1–12, 2022.
- [18] G. Rui, "Application of fire prevention and control based on smart city IoT platform," Fire Protection (Electronic Edition), vol. 7, no. 24, p. 51+53, 2021.
- [19] B. Guangjiang, "Cultural school of international relations: evolution, contention and characteristics," *History Monthly*, vol. 1, pp. 24–28, 2021.
- [20] Q. Haixia, "Theoretical innovation of international relations in my country: issues and methods," *International Political Science*, vol. 6, no. 1, pp. 4–7, 2021.
- [21] T. Weixi, "Reconstruction of the international relations system and Chinese strategy in the post-epidemic era," *Western Journal*, vol. 24, pp. 20–22, 2020.
- [22] Y. Qing and Z. Keling, "Theoretical research on security dilemma in international relations," *Theory of Learning*, vol. 11, pp. 45–47, 2020.
- [23] Z. He, "International governance scheme under the background of economic globalization," Wealth Times, vol. 11, pp. 176-177, 2021.
- [24] H. Wenlong, "The capital logic of platform economic globalization and its criticism and transcendence," *Marxist Studies*, vol. 6, pp. 134–145, 2021.
- [25] B. Xu, "Theoretical connotation and times significance of building a new type of international relations," *Research on international Issues*, vol. 3, pp. 1–22+136, 2021.
- [26] G. Haoyang and L. Rong, "Theoretical construction and practical development of new economic globalization: learning

- experience from Xi Jinping thought on economic globalization," *Contemporary Economic Research*, vol. 3, pp. 36–44, 2021.
- [27] L. Songyue, "An analysis of the new trends of economic globalization and the development of international relations," *Shanghai Business*, vol. 1, pp. 12–14, 2021.
- [28] W. Mingjin, "Crossroads of globalization, rethinking the new relationship between major powers," *People's Forum*, vol. S1, pp. 46–49, 2020.
- [29] M. K. Godwin, "Disaggregating diasporas as a force in role contestation: mobilising the marginalised in foreign affairs," *Taylor and Francis*, vol. 57, 2022.
- [30] B. Richard, "The Alabama claims tribunal: the British perspective," *The International History Review*, vol. 44, no. 1, pp. 21–58, 2022.
- [31] R. C. Frederick, "The globalization of economics and how it's changing domestic politics, international relations, and our lives," *Social Education*, vol. 77, no. 2, 2013.

