

The Strengthen and Depth of Data Legislation Research

-- Literature Visualization Analysis based on Cite Space and VOS Viewer

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Abstract: In order to understand the research status and trend of data legislation in China from 1986 to 2023, this paper uses Cite Space and VOS viewer software to draw a visual knowledge map. Research found that the research hotspot of data legislation mainly "through legislation to ensure the privacy of personal information and data and protection, through legislation to ensure the security of information and data research, through legislation to clarify the data rights and obligations, through legislation to promote data management and circulation problem" four categories. This study summarizes the current status of research in the field of data legislation, and could provide a basis for further research in this field.

Keywords: Data Legislation Research; Cite Space and VOS Viewer; Literature Visualization Analysis.

1. Introduction

With the advent of the information age and the development of digital technology, the value of data has been increasingly valued by society. On February 27, 2023, the "Overall Layout Plan for the Construction of Digital China" issued by the Central Committee of the Communist Party of China and the State Council pointed out: "We must optimize the digital development environment. First, build a fair and standardized digital governance ecosystem. Improve the legal system, strengthen the overall coordination of legislation, study and formulate legislative plans in the digital field, and adjust the legal system that does not adapt to digital development in a timely manner according to procedures [1]. In the legislative process in the data field, my country has currently issued laws and regulations such as the "Cybersecurity Law of the People's Republic of China" (hereinafter referred to as the "Cybersecurity Law", the "Data Security Law of the People's Republic of China" (hereinafter referred to as the "Data Security Law", the "Personal Information Protection Law" (hereinafter referred to as the "Personal Information Protection Law"), and other local regulations such as the "Shanghai Data Regulations", the "Shenzhen Special Economic Zone Data Regulations", and the "Shandong Province Big Data Development Promotion Regulations". During this period, academic literature research played a vital role in promoting the rule of law in data governance. However, Chinese scholars have more subjective research on "data legislation research" based on pure text, but relatively few quantitative and objective research are used. Therefore, by visually analyzing the number of publications, publication institutions, publication journals, publication authors and keywords in the research field of "data legislation", the knowledge graph of Chinese scholars on "data legislation research" between 1986 and 2023 can be more comprehensively displayed. Using quantitative data analysis methods, it more vividly reflects the current situation, hot spots and trends of "data legislation research" in my country's academic community.

2. Data Source and Research Tools

2.1. Data Source and Processing

The data of this study are sampled by the China National Knowledge Infrastructure (CNKI) database, and the search time is October 10, 2023. Steps for data selection: First, select advanced search mode in the China National Knowledge Infrastructure (CNKI) database, enter the "Search Conditions" interface and select the academic journal module, eliminating the complicated work of eliminating other literature types such as newspapers; second, enter "Data Legislation" in the "Manual Input Search Conditions Box" as the search topic, and set the document publication time range from 1986 to 2023, a total of 413 high-quality literature samples were obtained.

2.2. Figures

This article uses two sets of data visualization analysis software for the sample papers in China National Knowledge Infrastructure, the Knowledge Graph CiteSpace 6.2R4 advanced version with VOSviewer 1.6.18. Both software has the characteristics of diversity, time-sharing and dynamic. Its core function is to scientifically display the scientific historical development of a certain field and its research hotspots, cutting-edges and trends through visual exploration and analysis of certain "knowledge domains". Based on this, this article uses this software to analyze the research on data legislation in my country from five dimensions: publication time, publication agency, publication journal, publication author and highly cited articles, and uses graphs, tables and graphs to more intuitively experience the current hot topics and trends in my country's data legislation research.

3. Data Legislative Literature Research Results and Data Analysis

3.1. Time Analysis of the Number of Posts

By analyzing the release time of the paper, it can intuitively reflect the changes in the field of data legislation research over time, and we can understand the development history

and research progress of Chinese scholars in the field of data legislation.

From 1986 to 2023 (the detailed time is from January 1, 2013 to October 20, 2023, ending the search period), the analysis will be conducted according to the annual number of documents issued (as shown in Figure 1), and the research on data legislation can be divided into four stages: slow development period, gradual stage, explosive growth stage and stable and sustainable development. The early period was from 1986 to 2007. At this time, research on data legislation was still in its infancy. There were few related research. There were basically no articles on data legislation. There were only one or two scattered articles in 1986, 1998 and 1999. The total number of articles during this period was only 9. The number of publications was relatively small in 2008-2017. In 2017, the annual number of data legislation was only 24, and the number of research began to grow rapidly after 2017. Taking 2018 as the boundary, it suddenly increased to 48 articles in 2018, and continued to grow to 64 articles in 2019, and reached a historical peak of 66 articles in 2021.

Contact Table 1 We can see that this is closely related to the Cybersecurity Law passed by my country in 2017, the Data Security Law of the People's Republic of China (hereinafter referred to as the Data Security Law) passed in 2021, and the Personal Information Protection Law of the People's Republic of China (hereinafter referred to as the Personal Information Protection Law) [2]. With the passage

of the 2021 "Data Security Law" and the "Personal Information Protection Law", the basic legal framework in the fields of data security and personal information protection in my country has been basically completed, and data legislation is becoming increasingly perfect. There are 26 articles published in 2023, which is relatively small. This is because the search time in 2023 is as of October 20, not the total number of articles published in the whole year. However, the overall estimate is estimated from the time node that my country's research on data legislation in 2023 will be comparable to the total number of articles published in 2022. According to analysis and forecast, it may reach 65 articles. Therefore, based on Figure 1, from the perspective of the number of documents, the overall research on data legislation has tended to be stable and upward, which means that scholars' research on data legislation is still in progress.

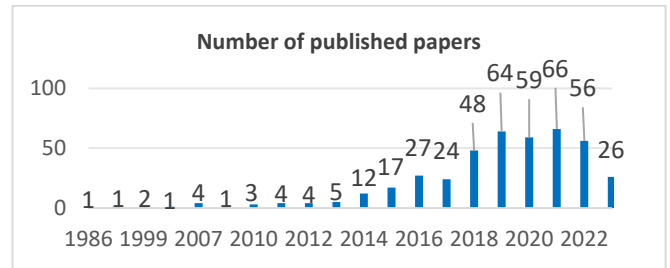


Figure 1. Year of document publication

Table 1. China's data main legislation

Time	legislation	Main content
2017	The "Cybersecurity Law"	requires strengthening the protection of personal information and stipulates that no illegal sale or provision of personal information to others shall be prohibited.
2018	"Regulations on the Protection of Network Security Level (Draft for Comments)"	Requirements for network security level protection
2021	"Data Security Act"	It is the first special law on data security in my country
2021	"Regulations on the Security Protection of Critical Information Infrastructures"	Provisions on basic information obligations and recognition
2021	"Personal Information Protection Law"	Clarify the boundary issues of personal information processing
2021	"Regulations on Network Data Security Management (Draft for Comments)"	Put forward requirements for personal information protection and supervision
2022	"Measures for Data Outbound Security Assessment"	Regulations on the safety of data exit security, etc.

3.2. Acknowledgments

A publishing institution is a specialized authority in a particular field of research, possessing excellent professionalism and leadership. According to the statistical analysis of the annual frequency of publications on data legislation by research institutions (as shown in Table 2), East China University of Political Science and Law is the institution with the highest number of publications.

The institutions that have published the highest number of articles are represented by East China University of Political Science and Law, Southwest University of Political Science and Law, China University of Political Science and Law, China Academy of Information and Communications Technology, Wuhan University, Zhongnan University of Economics and Law, The Third Research Institute of the

Ministry of Public Security, Xi'an Jiaotong University, and Renmin University of China.

From the perspective of the research schools of the publishing institutions, the main ones are law schools, economics schools, information management schools, schools of social public administration, and statistics schools. Within the field of law, intellectual property schools and economic law schools predominate. It is evident that there is a certain consensus in the fields of education, society, and law regarding research on data legislation, playing a leading role in promoting data legislation and improving the process of legalization in China. In recent years, relevant research has been conducted by institutions such as Zhongnan University of Economics and Law, China University of Political Science and Law, Wuhan University, Peking University, and Xi'an Jiaotong University. However, these institutions are relatively

independent of each other, with limited collaborative research.

Table 2. Statistics of the document volume, year and frequency of the publishing institutions

Serial number	Number of posts (Chapter)	mechanism	First release year
1	18	East China University of Political Science and Law	2010
2	15	Southwest University of Political Science and Law	2011
3	15	China University of Political Science and Law	2016
4	14	China Academy of Information and Communications Technology	2015
5	11	Wuhan University	2007
6	10	Zhongnan University of Economics and Law	2019
7	8	The Third Research Institute of the Ministry of Public Security	2014
8	8	Xi'an Jiaotong University	2015
9	8	Renmin University of China	2017
10	7	Shanghai University of Political Science and Law	2014
11	7	Shandong University	2018
12	6	Peking University	2017
13	6	Xiangtan University	2016

3.3. Analysis of Journals

A quantitative analysis was conducted on the top 15 journals that have published articles on data legislation (Table 3). These journals have published a total of 81 articles, accounting for nearly 20% of the overall publication volume (413 articles). Among the journals studied, "Legal System Review" has published the highest number of articles on data

legislation, with 12 articles. The second highest is "Information Security and Communications Confidentiality," with 9 articles. Looking at the top 30 journals, most are named with terms like "legal system" and "research." Overall, there is no single prominent journal that stands out in terms of publishing articles on data legislation; the journals are relatively dispersed, and the number of articles published in each is not significant.

Table 3. "Data legislation" published journal statistical table

Serial number	Journal Name	Number of publications (parts)	Percentage
1	"Legal System Review"	12	2.90%
2	"Information Security and Communications Confidentiality"	9	2.17%
3	"Research on Information Security"	6	1.45%
4	"Politics and Law"	5	1.21%
5	"Library Forum"	5	1.21%
6	"Library and Information Work"	5	1.21%
7	"China Information Security"	5	1.21%
8	"People's Forum"	5	1.21%
9	"Contemporary Guizhou"	5	1.21%
10	"Journal of Law"	4	0.97%
11	"Legal System and Society"	4	0.97%
12	"Science, Technology, and Law"	4	0.97%
13	"Procuratorial Review"	4	0.97%
14	"Research on Local Legislation"	4	0.97%
15	"South China Sea Law Journal"	4	0.97%

3.4. Analysis of the Author of the Post

3.4.1. Core Author

Price's Law is the distribution law used by intelligence science to measure the authors in a certain discipline. The calculation formula can be expressed by $M = 0.749 (*N_{max})^{1/2}$. This article uses 413 literatures for analysis to determine whether the core author group in the field of data legislation research is formed. The standard for its formation is that the number of publications by the core authors accounts for 50% and more of the total relevant literature. This article conducted a statistical analysis of the authors and the number of publications in the field of data legislation research and found that the first author Huang Daoli had 6 publications, so the minimum single publications of the core researchers in the field of data legislation should be based on $M_p = 0.749n_p \sqrt{}$

$N_p \max = 0.794 \sqrt{6} = 1.8347$ as the standard, which is close to 2 publications.

Therefore, it can be inferred that only authors with a number of publications of 2 or more can be identified as core researchers in the field of data legislation. Through statistics on 413 documents and the data in Table 4, it can be clearly seen that the total number of authors with 2 or more published articles is 60, accounting for 19.11% of the 413 documents, which does not meet the standards in Price's Law. It can be seen that based on the 413 documents in the China National Knowledge Infrastructure database as a sample analysis, my country's current research on data legislation is far from forming a core author group.

Table 4. Frequency of articles posted by core authors

Sort	Frequency	Years	Author
1	6	2014	Huang Daoli
2	4	2019	Hu Wenhua
3	3	2014	He Zhile
4	3	2016	He Bo
5	3	2020	Ran Congjing
6	3	2016	Zhang Min
7	2	2018	He Juan
8	2	2021	Feng Junwei
9	2	2020	Llu Ying
10	2	2015	Yuan Hao
11	2	2022	Sima Hang
12	2	2018	Zhou Hanhua
13	2	2023	Xia Han
14	2	2017	Kong Huafeng
15	2	2021	Sun Qi
16	2	2019	Zhang Tao
17	2	2016	Wen Yuheng
18	2	2018	Cao Hanyu
19	2	2021	Zhu Yani
20	2	2019	Li Zhaoyi
21	2	2015	Li Haiying
22	2	2020	Wang Huan
23	2	2019	Chen Huanhuan
24	2	2020	Chen Guirong
25	2	2021	Huang Jianjie

3.4.2. The Author Cooperation Network

The author cooperation network diagram can clearly

display the cooperative relationship between authors in the field of data legislation, as shown in Figure 2.



Figure 2. Cooperative network map in the field of data legislation research in China

From this, based on the analytical data in Figure 2 and Table 5, we can see that no good cooperative relationship has been formed between the authors of the published research on data legislation. Among them, Huang Daoli (6 articles), Hu Wenhua (4 articles), etc. are the main authors of this field; according to the connections in the map, it can be seen that scholars such as He Zhile and Ran Congjing have certain cooperative relationships. However, a researcher cooperation network of a certain scale has not been formed, and there is

less cooperation between scholars with such small-scale cooperation and the scholars with the largest number of publications.

3.5. High Cited Papers

By analyzing the highly cited papers in the field as shown in Table 6, we can gain clarity on the hot topics and cutting-edge directions that scholars are currently focusing on in the area of data legislation. According to Table 6, the publication

years of the highly cited papers are concentrated mainly in 2017 and 2018. Further examining the viewpoints presented in the top 10 highly cited papers, it is evident that scholars primarily focus on issues such as information protection in big data, legal positioning of data, and personal data governance. Professor Zhou Hanhua's article, "Exploring the Path of Incentive-Compatible Personal Data Governance,"

was written based on the legislative direction of China's Personal Information Protection Law. He believes that citizens, as information subjects, should be granted control rights over their personal information under public law, and that regulators should oversee information controllers involved in internal personal information governance, imposing sanctions when appropriate. [3]

Table 5. Top 8 authors in the number of publications in the field of data legislation research in CNKI

Sort	Author name	Number of publications (parts)	Percentage
1	Huang Daoli	6	11.54%
2	Hu Wenhua	4	7.69%
3	Ran Congjing	3	5.77%
4	He Bo	3	5.77%
5	Hong Yanqing	3	5.77%
6	Mei Ao	3	5.77%
7	Zhang Min	3	5.77%
8	Lin Zihan	3	5.77%

Professor Mei Xiaying, in his article "Between Sharing and Control: The Limitations of Private Law in Data Protection and the Construction of Public Order," proposed that data protection should transition from private benefit protection to public benefit protection, establishing "sharing" as the basic value orientation of data law. He also hoped to construct an integrated theoretical structure of "sharing-control" to improve the relevant systems of data legislation. [4]

Professor Zhang Ping, from the Peking University Law School, in his article "Legislative Choices for Personal Information Protection Law in the Big Data Era," suggested considering the establishment of a legal system for personal information protection officers (privacy officers) in China to improve data accountability in commercial organizations and to conceive the establishment of a private regulatory mechanism before national legislation is improved. [5]

Professor Xia Yan, in her article "The Debate on the 'Right to Be Forgotten' — Based on the Examination of the Legislative Reform of Personal Data Protection in the EU," introduced the concept of the "right to be forgotten," a legal right contemplated in the EU's Personal Information Protection Law in 2012, pointing out that addressing technological changes is also a challenge that the international community will face. [6]

Professor Zhang Jihong, in his article "On the Legislative Improvement of the Protection of Financial Consumers' Information Rights in China — Based on the Negative Risk Analysis of Financial Information Flow in the Big Data Era," discussed the lack of financial information protection, a subcategory of personal information protection, and proposed protective measures for the special group of financial consumers. [7]

Professor Jin Jing, in her article "The EU's 'General Data Protection Regulation': Evolution, Key Points, and Doubts," elaborated on the evolutionary history and legislative policy evolution of the General Data Protection Regulation, answering the profound question of whether personal data

protection law has a future and denying the legislative model of separating data sovereignty and controllers as a single value orientation. [8]

Scholars Zhang Yujie and Hu Zhengji, in their jointly authored article "The Doctrinal Debate, Judicial Stance, and Legislative Norms of China's Big Data Legal Positioning," based on the characteristics of big data such as non-specific crowds and low value density, believed that the strong property attribute and weak personality right attribute of big data should be recognized, and proposed the construction of a legal liability system such as the crime of infringing on data assets based on its characteristics. [9]

Professor Wang Lusheng, in his article "On the Symbolic Legislation of Criminal Proceedings and Its Consequences — Based on the Natural Semantic Mining of 3.03 Million Verdicts Big Data," analyzed the Criminal Procedure Law and pointed out that the consequences of "symbolic legislation" resulting from the virtualization of rights and the alienation of power have created a "fundamental dilemma" for criminal justice reform. [10]

Yang Zhen and Xu Lei, in their book "Research on the Legislation of Personal Information Protection in China in the Big Data Era," first discussed the deficiencies in China's personal information protection and industry self-regulation protection, clarified the necessity and urgency of establishing personal information protection legislation, actively proposed specific suggestions, and provided a proposed directory framework. [11]

Hu Wei, in his article "The Value Orientation of Cross-border Data Flow Legislation and China's Choice," proposed that China should follow the legal principles of prioritizing data sovereignty, attaching equal importance to personal information protection and economic development, and actively participate in international legislation formulation along with countries participating in the China-proposed Belt and Road Initiative, relying on the Chinese approach in international law. [12]

Table 6. High-frequency cited literature in the field of data legislation research in China

Sort	Total citations/time	Document title	Author	Publication time/year	Journal
1	786	Explore the way to encourage compatible personal data governance—the legislative direction of China’s Personal Information Protection Law	Zhou Hanhua	2018	Chinese Journal of Law
2	498	Between sharing and control, the private law limitations and public order construction of data protection	Mei Xiaying	2019	Chinese Journal of Comparative Law
3	329	Legislative choice for personal information protection in the era of big data	Zhang Ping	2017	Journal of Peking University
4	175	The dispute over the "right to be forgotten" - an investigation based on the reform of the EU's personal data protection legislation	Xia Yan	2015	Journal of Beijing Institute of Technology
5	162	On the legislation improvement of my country's financial consumer information rights protection--Analysis of negative risks in financial information flow in the era of big data	Zhang Jihong	2016	Forum of Law
6	160	EU General Data Protection Regulation; Evolution, Key Points and Questions	Jin Jing	2018	European Studies
7	139	Theories, judicial positions and legislative norms of my country's big data legal positioning	Zhang Yujie and Hu Zhenji	2018	Politics and Law
8	126	On the symbolic legislation of criminal proceedings and its consequences—Natural semantic mining based on big data of 3.03 million judgments	Wang Lusheng	2018	Tsinghua China Law Review
9	116	Research on the legislation on personal information protection in my country in the era of big data	Yang Zhen and Xu Lei	2016	Journal of Nanjing University of Posts and Telecommunications
10	115	Value orientation and my country's choice of cross-border data flow legislation	Hu Wei	2018	Social Sciences

4. Trend Discussion and Deepening Direction of Data Legislation Research

4.1. Research Hot Spot Analysis

The keywords in the literature are the author's high-level summary of the topics and contents in his paper. Therefore, by analyzing the frequency of keywords appearing in the

knowledge graph of "Data Legislation" keywords from 2013 to 2023, it can reflect the hot topics in the field of data legislation research in the past decade. The frequency of keywords appearing corresponds to the size of the nodes in Figure 3, and the correlation between keywords can be intuitively reflected by the distance in Figure 3. In view of this, this article summarizes the 23 sets of keywords with the highest co-occurrence rate in the past 10 years and presents them in the form of Table 7.

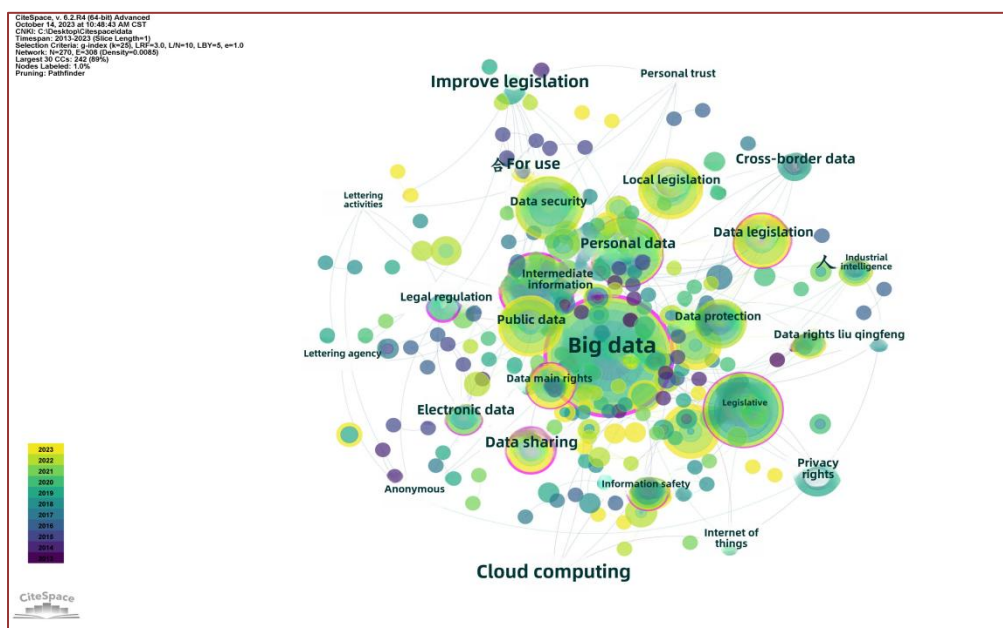


Figure 3. 2013-2023 "data legislation" keyword 2013 co-occurrence knowledge map

Table 7. Statistical table of core keywords

Sort	Frequency	Intermediary center degree	Years	Keywords
1	72	0.42	2013	Big data
3	25	0.3	2014	Personal Information
4	25	0.11	2014	Personal Data
5	21	0.07	2019	Data Security
6	20	0.09	2017	Local Legislation
7	18	0.09	2017	Public Data
8	15	0.03	2019	Digital Economy
9	15	0.16	2015	Data Legislation
10	14	0.08	2014	Data Protection
11	12	0.01	2020	Data Governance
12	11	0.11	2016	Data Sovereignty
13	11	0.23	2015	Data Sharing
14	10	0.04	2014	Privacy Rights
15	8	0.18	2014	Information Security
16	8	0.04	2021	Data
17	7	0.04	2019	Data Right
18	7	0.1	2014	Electronic Data
19	6	0.03	2018	Artificial Intelligence
20	5	0.01	2020	Promotion Regulations
21	5	0.04	2020	Security Law
22	5	0.05	2021	Data Openness
23	5	0.08	2015	Cross-border Data

In summary, there are four main research hotspots in China's data legislation literature.

Firstly, research focuses on how to safeguard personal information and data privacy and protection through legislation, primarily reflected in keywords such as "personal information, personal data, privacy rights, and data protection." With the acceleration of China's network infrastructure construction and the increasing number of internet users, more and more personal information is circulating online, while personal information leakage has become increasingly severe. Therefore, many scholars have conducted legislative research on personal information protection. Their research on this type of issue mainly focuses on: 1. Summarizing the serious consequences of excessive personal information collection and data monopolies by internet platforms, pointing out the inadequacies of personal information protection under the existing legal and regulatory framework, and emphasizing the necessity and urgency of legislation for personal information protection in China, with the aim of promoting legislation in this area [13]; 2. Positioning personal information protection in the data era, and balancing appropriate legislation between treating an individual's data rights as a proactive and beneficial right or a conservative right, as well as balancing industrial development and personal information protection [14]; 3. Balancing the protection and sharing of personal information data, and promoting the establishment of a systematic data public order in public law while protecting personal privacy [15].

Secondly, research focuses on how to safeguard information and data security through legislation, primarily reflected in keywords such as "data security, information security, data protection, and security laws." With the deepening popularization of the internet, everyone is a producer and user of data. However, while data releases value and serves society, it also faces many severe security challenges. While citizens enjoy the convenience brought by the internet, their personal information and privacy data are at risk of leakage and illegal acquisition by platforms; when enterprises leverage platform advantages for big data analysis

and computing, their risks increase with the volume of data; and when the state collects and circulates massive data, it is also at risk of information intrusions, thereby endangering national data security. However, data security is the bottom line and red line for developing digital technology and using data for production. Without data security, all data products will lose their safety guarantees and pose potential security risks [16].

Thirdly, research focuses on how to clarify the data rights and obligations of all parties through legislation, primarily reflected in keywords such as "data rights, privacy rights, and data sovereignty." Data, as a key production material for the development of the digital economy, a new economic form, faces practical difficulties in its circulation, such as ambiguous data ownership confirmation, doubtful data rights and interests distribution, and vague data circulation rules, which severely hinder the release of the economic value of data elements. The reasons for the circulation difficulties of data elements lie in disputes among various entities regarding data development and utilization due to the anomaly in data property rights allocation and differing interest orientations, leading to prominent difficulties in resolving disputes judicially and impeding the high-quality and efficient circulation of data elements. The "Overall Layout Plan for Building a Digital China" issued by the CPC Central Committee and the State Council points out: "Unleash the value potential of commercial data, accelerate the establishment of a data property rights system, conduct research on data asset valuation, and establish a mechanism for data elements to participate in distribution based on value contributions." [17] It is evident that how to clarify the content and ownership structure of data rights and establish a comprehensive data rights protection system is a hot topic for scholars researching data legislation.

Research on how to promote data governance and circulation through legislation primarily focuses on keywords such as "data governance, public data, data sharing, data openness, and cross-border data." China's existing laws, regulations, and policy documents on data governance primarily emphasize data protection, with little attention paid

to issues related to data acquisition and circulation, and there are even still some legislative gaps and deficiencies. However, the law should address uncertainties arising from unclear provisions in data circulation in practice [18].

4.2. Research Trend Analysis

The Time-Zone View (Figure 4) provides an overview of the overall evolution of research on data legislation in China over time. From 1986 to 2004, the research topics primarily revolved around categories such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), trade secrets, the Trans-Pacific Partnership Agreement (TPP), exclusive rights for pharmaceutical data, patent protection for pharmaceuticals,

and electronic data.

Between 2005 and 2011, the number of related research topics increased. During this period, topics such as personal data, data protection, data legislation, and personal data protection began to be addressed in relevant research.

From 2012 to the present, a large number of related research topics have emerged, showing a trend of continuous expansion. Representative research topics during this period include local legislation, data security, the digital economy, privacy, artificial intelligence, the big data era, and personal information protection laws. It is evident that the focus of research on data legislation in China has varied across different periods, and after 2011, the content of research on data legislation has been continuously enriched, with many new research topics emerging in the past decade or so.

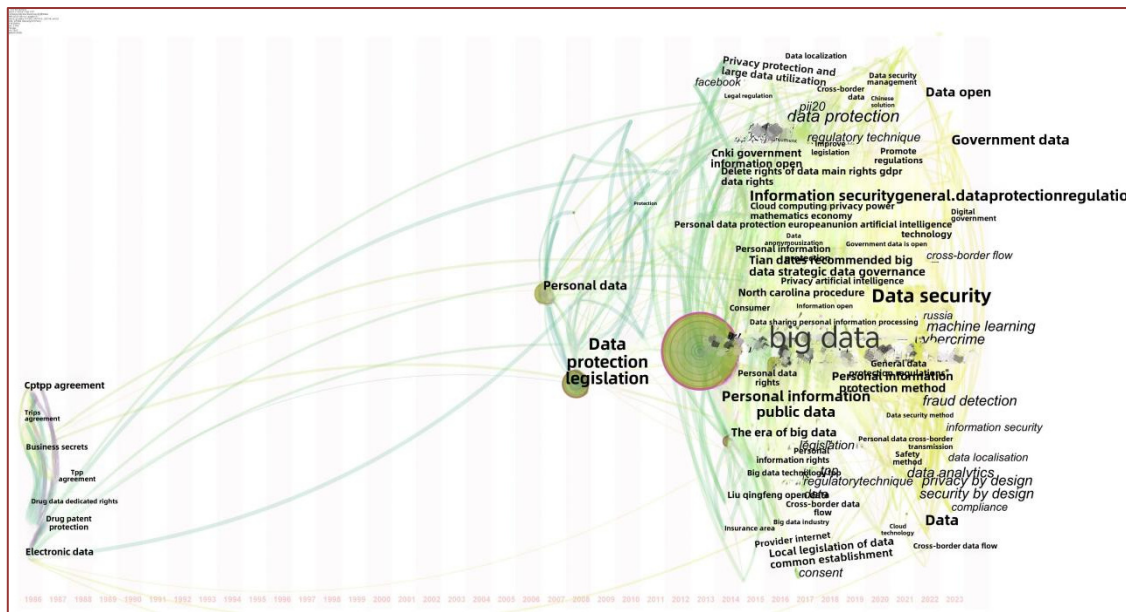


Figure 4. Keyword time-zone distribution knowledge map

4.3. Frontier Research Analysis

Highlighted words refer to words with a high frequency of change over a certain period of time, so as to count the vocabulary frequency in the title and abstract of literature in a certain research field. Through the analysis of prominent words, we can find the research focus over a certain period of time to explore some development trends. Therefore, a total of 15 emergent words were obtained in the keyword co-

occurrence knowledge graph, as shown in Figure 8. The top 6, that is, the emergence intensity of above 2.0 is the digital economy (3.36), data (2.52), privacy rights (2.2), public data (2.19), data sharing (2.07), and security law (2.05). Among them, digital economy, data, public data, data sharing, important data and blockchain are the latest emergence words, indicating that research on topics related to them will become an important research frontier in my country.

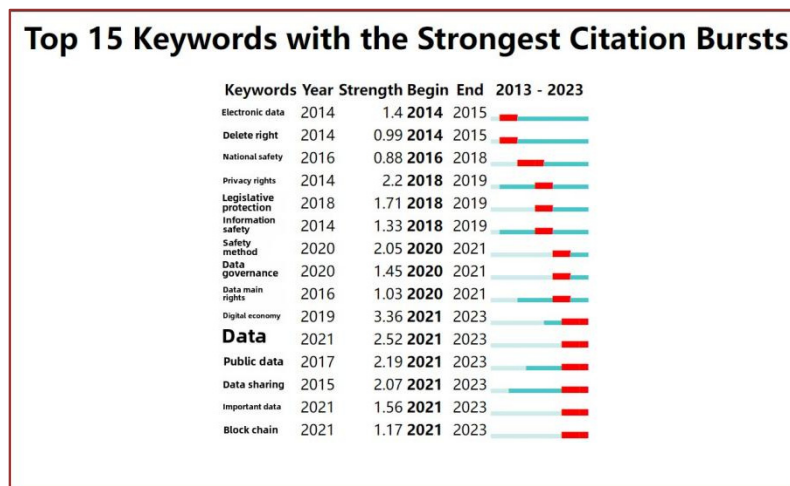


Figure 5. Summary table of prominent words

5. Conclusion

This paper uses Cite Space software to analyze 413 Chinese literatures mainly from the Chinese Social Science Citation Index (CSSCI) database, which are mainly derived from the CNKI. The research status of my country's data legislation since 1986 was quantitatively and qualitatively analyzed from the aspects of publication, high citations, important authors, and keyword co-occurrence. The main conclusions are drawn as follows.

With the development of digital technology, research related to data legislation has attracted more and more attention from home and abroad, and the number of publications on the field of data legislation in my country has generally shown an upward trend. Taking 2018 as the boundary to the present, due to the various problems exposed in data in practice, coupled with the release of a series of laws, regulations and policy documents such as the "Cybersecurity Law", "Data Security Law", "Personal Information Protection Law" and "Twenty Articles of Data". The academic community is constantly increasing in its enthusiasm for data legislation research. In terms of journal sources, 413 Chinese literatures are scattered in many different academic journals, and the literature sources are generally scattered; in terms of core authors, the core authors mainly come from traditional law schools such as East China University of Political Science and Law, Southwest University of Political Science and Law, China University of Political Science and Law, Wuhan University, and research institutions such as China Communications Research Institute, among which East China University of Political Science and Law and Southwest University of Political Science and Law are the main publishing institutions; in terms of research hotspots, the research hotspots in different periods are also different. The previous research hotspots mainly focus on the coordination and application of international agreements such as the cptpp agreement and trips agreement, while the later research hotspots mainly focus on topics such as data privacy, data security, and data circulation governance.

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