

The Chinese Model of Open Government Data

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Abstract: The opening up of government data is a crucial part of China's growth aim to establish a powerful data country since it will help Chinese governments at all levels improve their administrative effectiveness and service capacity. Clarifying the special value of open government data for China, this paper examines the significant shift in China from information disclosure to data openness based on the fundamental characteristics of public data. It also draws on and summarizes the priceless experience of developed countries in the introduction of laws and the development of core systems related to open government data. Given China's particular national circumstances, this will lead to a new way of thinking about the dissemination of government data for use and reference there.

1. Introduction

Exchanges and contacts between nations are increasing as a result of economic globalization, and as the digital economy grows, nations are focusing more and more on the transparency and security of their own data. In order to benefit from the current wave of data openness, several nations are actively involved in the development of pertinent international laws. Data sovereignty and data advantages have thus become a component of global competitiveness. Among these, the practice of making public data available has caught the interest of many nations. As one of the nations entering the big data era, China's data factor has spread throughout the entire nation, and the worry for maximizing the value of the release of government data has been growing. The legal framework for the opening, use, and protection of many types of data has not yet been specifically implemented in China's data laws, and the legislation governing the release of government data is still in its infancy. As a result, more work needs to be done to improve the legal concept's definition and the establishment of the laws' relationships with one another. Opening government data is currently one of the key tasks in building a strong data country in China. How to effectively open government data, activate and release the data dividend, and make it accessible to the public are still issues that China needs to seriously consider at this time, and there is still much legislative work to be done.

2. The Connotation of Government Data

The foundation for describing government data in a wide sense should be to define the fundamental concept of data. The Data Security Act makes it clear that personal data records made electronically or by other means are included in the data that the Act covers. As a result, data may be seen as the output of humans using specific technologies to record social activity and natural objects. This makes data a human creation and one that should be beneficial to both individuals and social interactions[1]. Therefore, in a broad sense, "government data" can be described as any types of data resources created or collected by administrative subjects while exercising their legal power and documented in a particular format to facilitate their use and processing. Both the government's own administrative data and the public data that are integral to the people's way of life are included in the data that the government collects in the course of carrying out its tasks. The latter are analyzed and processed to produce the data that the government uses, including but not restricted to statistical analysis reports and information on scientific research activities. Government data, sometimes

referred to as public data or public information resources, in a narrow sense generally refers to the data gathered or generated by the government in the course of its duties[2]. The first half of the two is essentially the same when compared to government data in the broad sense, but in the second half, the relationship between government data and government affairs data, public data, etc. is defined by the broad understanding of government data as the relationship of including and being included, but the narrow understanding of government data is equivalent to government affairs data, public data, and public information resources, i.e., the equivalence relationship.

In conclusion, it is preferable to have a broad grasp of the notion of government data, and the government data stated below are also understood in a broad sense. It is simple to discover that a limited interpretation of a definition only emphasizes the universality of governmental data while ignoring its inherent differences and logic. This makes it challenging to avoid the situation where the law is overbroad, makes it simple to render the provisions meaningless, and imposes certain restrictions.

3. Research on the Legislative Model of Open Data in the Comparative Law Perspective

The United States is an example of the second legislative model, which advocates achieving strict regulation of open government data through specialized legislation, while the United Kingdom is an example of the first legislative model, which advocates enhancing and amending the government information disclosure law to adapt to the realistic changes of open government data[3].

3.1 Legislative Model of Open Government Data in the United States

The legalization of its open government data demonstrates blatantly progressive traits, and the United States has been at the forefront of open government data in the entire world. Obama formally signed the “Transparency and Open Government Memorandum” executive order in 2009, which emphasizes the value of collaboration and seeks to take the relationship to a national scale in order to boost the government's administrative effectiveness and ultimately create a win-win situation.

Along with its dedication to fostering greater social cohesion, the United States has a wealth of expertise supporting and investing in fundamental technologies, which it will use to establish a strong technological foundation for its open government data sharing website[4]. The 1995-founded THOMAS.Gov website is a prime example of open government data in the United States. The website offers a plethora of legislative tools as well as a dynamic legislative process to the public. In truth, the Library of Congress, which runs THOMAS, has a database of all the public data that it uses, but it does not make that database openly accessible to the public in its original form, denying the data the chance to be creatively used or changed into something new. THOMAS.Gov was thus replaced by Congress.gov in 2004 due to its shortcomings. Since that time, the community has never ceased deeply examining how the US government uses big data. The first was the debut of OpenSecrets.org, a campaign finance website from the Center for Responsive Politics, which offered the public an alternate method of displaying the enormous quantity of data processed by Congress and assisted citizens in following legislation of interest to them. In order to actually pull data out of government, GovTrack.us was one of the first websites in the world to offer comprehensive parliamentary data free of charge and open to all users. In addition, the legislative database is a key component of the website that allows the general public to read the laws that Congress is considering passing. In addition, there are new websites and programs that use data from GovTrack.us (such the programs and APIs developed by the Sunlight Foundation), and they all aim to give the public more access points to government data.gov is a national platform that has produced considerable benefits as a result of its operability, effective search capabilities, and user engagement. It is a technological portal that offers a great platform for data exchange to enhance the utilization of government data[5].

The Open Government Data Act offers a crystal-clear response to the definition of open data, how the data is formatted, and the relevant regulatory organizations. An executive order titled “Automatic Openness and Readability as the New Government Information Standard” was signed by President Obama in 2013 and made automatic readability and openness the legal minimum requirement for government data. This Presidential Executive Order is partially replaced by the Open Government

Data Act. Readability is the key to “machine readability,” which necessitates that data be presented in a way that guarantees the stability of the data's meaning and obviates human intervention. The phrase “open by default” indicates both legal and format openness. The kind of data sets that can be made publicly accessible are specified under a “open license.” The legislation also addresses the issue of attribution with clarity. A well-functioning policy must be reasonable, accountable, and transparent, and open government data should not only encourage public accountability but also give more thought to its own responsibility. The “Systematic agency review” system set forth in Article 305 of Title 5 of the United States Code is further clarified and explained by the Open Government Data Act. It first establishes the Chief Information Officer (CIO) system, which mandates that all government agencies name a CIO to exercise the appropriate executive and supervisory authority in accordance with the law. This is also the first time that the United States has formally established the status of the CIO in the form of legislation[6]. The law also mandates that the relevant offices and committees submit the Government Accountability Office Report (GAO Report) and publish the Open Data Compliance Report on a regular basis.

Although there is no specific law regarding the classification and declassification of open government data in the United States, there are a number of general policies that are permeated with government security data and unclassified but sensitive data, which can also be regarded as the legal basis for the classification and declassification of open government data in the United States. Obama signed Presidential Order 13526 in 2009, which classified national security information into three categories: Confidential, Secret, and Top Secret[7]. It also established a declassification center to increase the effectiveness and capability of declassification. In addition, in 2010, Obama once more signed Presidential Order 13556, Controlled Unclassified Information (CUI), and its final regulation, which covers three primary areas: general information, important CUI program components, and program management subsections, was formally released in 2016.

From its municipal Open Data Act to the national Open Government Data Act, the United States, the most typical nation to use the second legislative model, shows that its preferred legislative strategy is to create specific legislation on government data openness. The specific legislation underscores the usefulness of government data in both the public and private sectors and is compatible with the overall national setting of the United States. In the United States, the establishment of this special statute offers a more comprehensive legal protection for accessible government data, but it also has drawbacks related to its high technological and financial requirements.

3.2 Legislative Model of Open Government Data in the UK

Open government data in the UK entered the preparatory stage with the official launch of the “Making Public Data Open” campaign initiative in 2009, and it entered the practical stage with the official launch of the open government data website Data.gov.uk in 2020[8]. The website includes thousands of official data sources from all around the UK and offers information on practically every topic of interest to the country. The UK Government Licensing Framework, which offers a clear answer in terms of licensing techniques, including Open Government License, Non-Commercial Government License, and Charged License, was introduced by the National Archives in 2010 in direct response to the launch of Data.gov.uk.

The relevance of citizens' rights is at the heart of British government data transparency. In terms of civil rights, citizens are the subjects of administrative counterparts, and the civil rights in this case are more likely to be the people' public data rights[9]. Open government data is the act of administrative subjects releasing government data to administrative counterparts. In reality, the data right only encompasses the general data property right and the personal data right, leaving out the public data right. The public has the right to demand open access to national data, and any public access and use of data is in some sense also in the public interest. Administrative agencies providing data resources to the public should be seen as an act of public service provision that also directly promotes the access and use of corresponding data. The right to public data, which serves as the legal foundation for

government data access, has a wide range of rights and characteristics, with equality and social dependency serving as its primary characteristics.

One of the key methods the UK government uses to strike a balance between open government data and the protection of individual privacy is the creation of strategic policies. Seizing the Data Opportunities: A Strategy for UK Data Capability, for instance, offers a two-way approach to protecting personal privacy by laying out what information administrative entities should be allowed to access and requiring them to keep an eye on and rein in data misuse in order to maintain the security of citizens' privacy. Second, the UK is dedicated to releasing and maintaining a number of license agreements to safeguard its residents' privacy. This has concentrated on narrowing the scope of the three license types in the aforementioned UK Government Licensing Framework, the most popular of which, the Open Government License, for example, expressly excludes personal data, data that is prohibited by law from being opened, and data that is opened without the consent of the data rights holder. The framework specifically highlights the significance of the pertinent legal foundation for personal privacy protection in Appendix B and also analyzes the framework's content in light of the relevant legal basis for personal privacy protection in other Acts[10]. However, the U.K. has not yet created any special legislation on the protection of personal privacy, nor has it formally established the concept of privacy. Instead, its legislation protecting the privacy of its citizens is still at the incidental and indirect protection stage, making it possible to obtain some judicial remedies only when the right to privacy is combined with other rights remedies and creating significant uncertainty regarding the privacy protection.

The UK has never passed a specific law requiring the release of government data, making it the most common nation to follow the first legislative paradigm. The UK has been updating its government information disclosure law since 2012, and in the years that have followed, the UK has published a number of plans and documents to complement the implementation's current state in an effort to quickly and effectively address the issue. Although this legislative approach is effective and flexible, its content does not fully adhere to the standards for open government data due to the significant distinction between open data and open government information.

4. Exploration of the Legislative Model of Chinese Government Data Openness

4.1 Data Openness Should Realize the Freedom of Access

State secrets, commercial secrets, personal privacy, and other private data should of course be excluded, which can also be regarded as restricted data access liberalization[11]. The principle of data access liberalization has long been embodied in the relevant legal documents and policies on government data opening in the United Kingdom and the United States, and has become the legal basis for the obligation of administrative organs to disclose relevant data to the public. Establishing an uniform government data sharing platform with strong technical support and integrating these government employees who are committed to data management into the legal framework are two ways to achieve data access liberalization in the U.K. and the U.S.[12].The development of public data platforms in the U.K. and the U.S. has evolved continuously with the times, and the creation and growth of open data websites at the national and local government levels in the two nations has given China fresh ideas for the creation of related technical websites. China does not yet have a platform for open government data, and diverse data sources are dispersed among many websites. For instance, if a Chinese citizen wants to find the most recent census data, their first option may be to type “Chinese government population data query” into their own search engine. The Chinese government website will then appear after clicking the search, but it will be discovered that even if the search for population keywords is done in the official website, the search results are still outdated. However, even if you use the official website's keyword search to find population-related information, you will only come up with policy documents rather than direct and understandable statistical data, so you may want to look at other websites like the National Bureau of Statistics and China Statistical Information Network for further research. These official websites also experience technical issues with page transfer, data that cannot be displayed at all, and even a porous network barrier that is

simple to breach. Therefore, it is still necessary for governments at all levels to allocate resources and labor to the design of modules, categorization of projects, and technical support for open government data websites. After maturity, even a nationwide unified open government information data platform should be formed, and clear jump buttons should be added to the official government websites to facilitate quick and effective access to data. To ensure the timely and accurate delivery of data as well as the security and upkeep of data platforms, new departments devoted to data management and data creation should be gradually established as part of the practice of reforming government agencies. The government should have made data openness a top priority because the true release of data value will result in the flow of resources and information, which will foster innovative economic vibrancy.

China naturally maintains its own opinions and considerations regarding the greatest level of data openness given the late start of its data legislation, and China continues to face challenges as a result of the unknown nature of data law exploration. China's legislators are continually examining ways to strike a balance between data benefits and data security and, based on this balance, to take into account the data interests of all relevant subjects while taking into consideration the concerns connected to the degree of data access liberalization.

4.2 Data Opening Should Form a Directory List

Government data should be categorized and graded more precisely and effectively, and if necessary, a list of open data catalogs should be created. As a result, arbitrary categorization and grading will only lead to system confusion. Instead, classification and grading of data should be multi-dimensional and adhere to specific standards. National security data is the most crucial core data among various government data, so a stronger management system should be put in place for core data pertaining to national security, the backbone of the national economy, significant people's livelihoods, and key public interests. China should create the following major categories for the government data list based on the classification plan and CUI framework that the US introduced for national security information, and then, like the UK, refine and update the sub-categories under the major categories in response to subsequent changes in reality to continuously improve the efficacy, timeliness, and completeness of the directory list.

The first data type that needs to be separated is the core data. The core information in government data primarily consists of crucial information in the areas of finance, healthcare, education, transportation, and other areas related to national security and people's livelihood, as well as other information that is not publicly disclosed but may jeopardize national security and the interests of the public. Public data should make up the second category of data in the government, and public data should be the primary data that are either conditionally or unconditionally open in the opening of government data. All other data, with the exception of those that are obviously inappropriate to be opened, should be accessible to and usable by relevant parties. The final group of data is known as "other data," which is a subset of the three categories of government data mentioned above and does not fall under the definition of a state secret.

4.3 Data Openness Should Focus on the Protection of Personal Information

Although making government data more accessible to the public can increase its social value, doing so can also make it more difficult to preserve people's privacy and other legal rights when such data contain a lot of personal information. Personal information cannot be totally eliminated or forbidden because it is not an absolute private right and is therefore naturally available in accessible government data[13]. Finding a balance between preserving personal information and releasing government data is thus one of the problems of open government data. China officially introduced and implemented the first Personal Information Protection Law in 2021, which is a significant advancement in the development of China's data law and has made the protection of personal information legally enforceable since then, in contrast to the United Kingdom and the United States, which have not created specific legislation for the protection of personal information. The legislation's restrictions make it challenging for the law to serve as a legal foundation for the protection of citizens' private information in the event of data breaches and leaks.

The Personal Information Protection Law's current regulations do not account for the fact that

personal information is publicly available and do not leave room for the requirements being investigated in practice relating to the protection of personal information in open government data[14]. The law addresses how governmental entities handle the processing of personal data, but its primary goals are to safeguard individual rights, provide the public control, and control how individuals handle their own information in accordance with the principle of informed consent. There is no particular law regarding the release of central government data in China. Therefore, in order to publicly manage and use personal data related to the government, local government agencies must first receive mutual recognition from all data subjects and their consent. This will undoubtedly significantly lengthen the time required for the disclosure of government data and information and further restrict the application of the law on public sharing of information in the actual disclosure of government data. This is due to the fact that it is unable to fully energize governments at all levels' passion for data transparency. Five exclusions for individual consent are listed in Article 13 of the Personal Information Protection Law, however it appears that the specific instance of open government data-which is in turn established by the design of the open government data legal system-should not be included[15].

The best strategy to guarantee the privacy of personal information in open government data is to anonymize it. The safety and proper distribution of personal information in open government data is maximized when it is anonymized because it does not serve any identification purposes and does not, therefore, come under the purview of the Personal Information Protection Law. However, there is still a chance that personal information could be de-anonymized or re-identified because anonymization technology is currently not completely infallible and is not completely secure[16].The California Consumer Privacy Protection Act and the EU General Data Protection Regulation present a novel solution to this issue: doing away with identification verification. As a result, China likewise mandates that data processors adhere to the de-identification requirements in pertinent legislation. The Personal Information Protection Law still applies to identifiable information, so further refined regulation of de-identification of personal information will be the choice of China's legislative path. However, the elimination of identification only restricts the direct identification of data, not completely eliminating the possibility of indirect identification.

5. Conclusion

Open government data has drawn increasing attention as one of the most crucial components of creating an open government in any nation. Many developing nations are concentrating their emphasis on changing their government data openness in order to meet the demands of the big data era. China is the largest developing nation in the world, and as such, its data legislation is still in its infancy. Many areas of data protection are even unregulated, and legislation regarding open government data is still being considered as a first step. China should choose the compromise legislative path of introducing the Open Government Data Regulations first and then the Open Government Data Act in due course, and carry out the liberalization of government data access, the government data inventory list system, and the core system of personal information. This is based on the valuable legal rules and policy systems related to open government data in the UK and the US. to gradually create and enhance China's legal framework for data protection at the level of governmental information. One of the global values for China to continue to delve further into this area is the fact that the successful experience of China's study of government data openness legislation will also inevitably supply other developing countries with fresh new legislative ideas and concepts. It is anticipated that as legislative technology advances, our lawmakers will gradually develop and put into place the necessary rules and processes to support the use of open government data, and that a government that embraces open data will soon be a reality.

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