LEGAL CHALLENGES FOR DATA-DRIVEN SOCIETY

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• Social Changes Driven By Big Data
• Major Legal Challenges
• Future Actions
SOCIAL CHANGES DRIVEN BY BIG DATA

- Big data changed human life and production.
- Big data has created new rights and expanded the scope of rights further.
- Big data has also brought about changes of public management.
Formation of a data-driven society

- **Intensive or instantaneous data interaction becomes a way of living**
  In everyday life, vast amounts of information is produced, stored and exchanged as data to provide the base and substance for data-based life.

- **Data resource becomes an important social resource**
  Considering the huge value to be derived from data, data resources are also an important social resource, being present everywhere and bringing endless innovation.

- **Data quantification becomes a way of thinking**
  Big data tends to make people think on a quantitative basis and gives rise to a new way of thinking that focuses on data and highlights statistics, quantification and relevant logic.
Expansion of rights and obligations in the data-driven society

- **Data ownership**
  A core question is: does the participant whose data is used own his data? In practice, such ownership may be disputed, but for sure, opening and using data will result in new rights and obligations in connection with data ownership.

- **Right to Data**
  More and more countries and governments begin to attach importance to this right and consider it as fundamental and as important as other civic rights. The right to data also fairly reflects the degrees of social democracy and government openness.

- **Data Privacy**
  People produce and leave the footprint of data anytime and everywhere. The lack of privacy arising from data footprints results in rights and obligations that are totally new.
Transformation of public policy making

- **Predictability**
  The government always prefers a public policy to be predictable, while big data analysis technology can help to identify trends and establish a mechanism for a more effective and timely forecast of public affairs.

- **Public participation**
  By involving all stakeholders in the process of policy making and allowing social organizations and individuals to participate in public administration, the government can effectively define public policy.

- **Objectivity**
  Through data collection and in-depth quantitative analysis, big data can discover previously unknown relevance. Thus, objective data can be used to predict probabilities and changes, analyze trends, and provide a more objective basis for decision making.
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Traditional issues, such as open government data and personal data protection, are facing new challenges in the context of big data.

In recent years, with the development of a data-driven society, some new issues, such as data exchange and cross-border data flows, have attracted attention from all parties.
The Government possesses over 80% of the entire social information resource and is the largest data producer and owner.

The No.1 problem: the openness of government data has a substantial effect on data development and utilization.
In the early stages, the focus used to be on government information disclosure on the improvement of government information transparency.

Currently, opening up government data has become an appeal for more and more people and an important consensus for the international community.
On September 5, 2015, the Chinese Central Government published “Action Plan to Promote Big Data Development”. The plan proposed comprehensive requirements on key areas such as, open mechanisms, open platforms, and open criteria.

In January 2009, US President Obama signed the Memorandum on Transparency and Open Government, taking the lead to open up government data, and thereafter, a rising number of countries has joined in, and government data was opened up to a wider and deeper extent.
Legal Challenges: Open Government Data

- Despite some achievements, currently there are still many challenges for opening up government data.

- Inadequate Awareness
- Poor Policy Implementation
- Absence of Detailed Criteria

- The gap between developed countries and developing countries is further widened

- Most countries fail to define the elements in connection with open government data
In recent years, big data applications have been rapidly penetrating various industries and sectors, with the value of data resources, as a production factor and social wealth, becoming increasingly recognized. Also, there has been a rising demand for online data exchange.

The scale of global big data industry

- **2015**: US$ 140.3 billion
- **2020**: US$ 1027 billion
With the continuous expansion of data transactions, many problems are emerging. For the moment, data exchange faces mainly the following problems:

- Sound legislation and regulation on data exchange is not yet in place.
- Data ownership is not yet defined.
- Criteria for data exchange are absent.
Legal Challenges: Personal Data Protection

Driven by commercial interests, the basic principles of limitation and necessity, as set forth in the law on personal data protection, have been repeatedly breached in practice.

In the background of Big Data, data which has been anonymized can also be identifiable when combined with other data.

In the big data environment, personal data protection is under the full impact arising from uneven distribution of the power of data control, and conflict of interest of data use by individual persons, public and private organizations.
Legal Challenges: Personal Data Protection

Chinese Practice of Personal Data Protection

• At the end of 2012, the Standing Committee of NPC passed the “Decision of Reinforce Protection of Internet Information”. This is the first time in China that the protection of information security of citizens and corporations has been regulated at the law level.

• At the end of 2016, the Cybersecurity Law was passed. The definition and scope of personal information, the principles of collecting personal information, and the responsibilities of relevant subjects have been regulated in Cybersecurity Law.
Legal Challenges: Cross-border Data Flows

In the report on *Data protection regulations and international data flows: Implications for trade and development*, the UNCTAD has pointed out, “cross-board data flows are increasingly important for trade, innovation, competition and data mobility for consumers. However, there is also a general consensus that the movement of data cannot be completely unrestricted if legitimate concerns are to be addressed.

- Some countries, typically the United States, have been calling for cross-border data mobility to promote global digital economy.
- Other countries began to tighten the restriction of cross-border data flows and adopt their own data enactments in order to protect personal data, prevent foreign surveillance and safeguard national security.
Legal Challenges: Cross-border Data Flows

Chinese regulations about Cross-border Data Flows

According to the Cybersecurity Law, personal information and important data which is made or collected during the operation of critical information infrastructure must be stored in China. If it is necessary to transfer it outside of China for business purposes, the safety assessment must be carried out in accordance with the measures made by the Cyberspace Administration of China in conjunction with the relevant departments of the State Council.

In accordance with the Credit Reporting Industry Regulation, the credit reporting agencies must arrange, preserve and process information collected within the territory of China.

Besides, data on personal finance or health information, as well as data produced in Internet publishing and Internet rental must be stored in China.
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Future Actions:
Promote the formulation of harmonized international rules

- Legislations in different countries differ a lot
  Due to different national interests, historical conditions and other circumstances, such national data regulations tend to vary widely and even contradict to each other

- New challenges arising from big data have not been regulated in internationally
  International regulations which are relating to data ownership, data exchange and other issues arising from big data development are lacking
Future Actions:
Promote the formulation of harmonized international rules

- International organizations can make uniform principles and rules about data regulation

In 1980, OECD published the Guidelines on the Protection of Privacy and Trans-border Flows of Personal Data, proposing eight principles about personal information protection, which have been incorporated into many national enactments.

- As the most important international organization in telecommunication, ITU can make international rules to promote the development of Big-data.

In 2013, ITU published a technical observation report, titled “Big Data: Big Today, Normal Tomorrows”. In August 2015, ITU published the first set of big data criteria.
Future Actions:
Maintain the balance between security and development

- The massive gross in data brings the chance of development for Big Data, but in contrary also leads to the enlargement of risks and harm of data leak.

**Security**
- To promote the data legislation
- To cultivate the awareness of data security of enterprises and individual
- To encourage the development and promotion of data security technologies

**Development**
- To make strategies that promote the development of the big data industry
- To give policy, financial and human resource support to big data.
Future Actions:
Put emphasis on the protection of the right to data

- Among all challenges arising from Big Data, people’s right should be protected first.

- As the right to data is a new kind of right it has not been clearly and uniformly defined internationally.

- The right to data must be specified and highlighted by legislation, and the legal liability for the infringement of personal data must be implemented.

- The variety of the right to data can be enriched. As EU provided for several new types of right like, right to amend, right to be forgotten and data portability in GDPR.
Future Actions:
Put emphasis on the protection of the right to data

Specific laws about the protection of personal information should be made to clarify the basic rights of citizens.

Personal data protection shall be reinforced in the areas of new technologies and new businesses.

International cooperation and dialog should be reinforced to make international rules, and strengthen cross-border enforcement cooperation in personal data protection.
Future Actions:

Closely keep track of data problems in emerging areas

Cloud computing, Internet of things, artificial intelligence (AI) and other emerging technologies are rapidly growing, and bring some new problems, like cross-border data transmission, data openness and security for Internet of things, malicious source of data in connection with AI development and usage.

It is necessary to closely keep track of new data-related problems in emerging technological and industrial sectors.

Nations shall actively seek for technical, political and legal paths of solution, so as to promote faster development in emerging areas.
THANKS