Chapter 6: Data policies, laws, and regulations: Creating a trust environment
The social contract for data

**VALUE**
The full value of data materializes when systems enable the use and reuse of data for different purposes.

**TRUST**
A trust environment is created when the rights and interests that all stakeholders have in data are safeguarded.

**EQUITY**
All share equitably in the benefits of data when investments and regulations create a level playing field.
Data governance provides means to enforce the social contract

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From Contact Tracing to Vaccine Certificates: Enablers & Safeguards in the time of COVID-19

Source: who.int
A multidimensional legal framework for trusted data transactions

Source: WDR 2021 team
A differentiated approach to enablers and safeguards is needed to build trust

**A. PERSONAL DATA SAFEGUARDS:**
To protect against misuse and enable individual agency/control over data use

- **Limits on use**
  - Lawfulness
  - Purpose limitation
  - Data minimization
  - Retention/storage limitations
  - Adequacy mechanisms for cross-border data transfers

- **Individual and collective rights**
  - Consent
  - Portability
  - Notice of use/breach
  - Accuracy and rectification
  - Limitations on automated decision making
  - Redress
  - Effective enforcement

**B. ENABLERS:**
To mandate the use/sharing of public data and facilitate private sector data sharing for “public intent”

- Interoperability of data and systems
- Data portability mechanisms (common data formats, APIs)
- Open data
- Access to information
- E-transactions (e-signature; trust services, including digital ID)
- Carrier immunity/intermediary liability
- Intellectual property rights (IPRs)
- Sharing friendly licenses/voluntary licensing (e.g., FRAND terms)

**C. NONPERSONAL DATA SAFEGUARDS:**
To promote certainty and predictability

- Contractual (private law)
  - Indemnities
  - Liabilities
  - Penalties
- Intellectual property rights (IPRs)
- Exceptions to intermediary liability
- Data localization/local processing
- Cybersecurity/cybercrime
An Evolving Social Contract: the Arc of Data Protection

Figure 6.2 The evolution of data protection

- **1789** Treaties of Westphalia Introduces the rule of law
- **1848** Declaration des droits de l’homme et du citoyen Expression of individual rights
- **1948** Article 12, UDHR Rights codified in international law
- **1973** OECD guidelines
- **1981** Fair Information Practices Modern expression of data privacy
- **1983-1985** EU directive First expression of data protection rights of the digital age
- **1995** OECD Council of Europe
- **2009** Convention 108 2019 Convention 108+ codifies data protection
- **2018** Privacy by design
- **2018** GDPR
- **2018** UN Principles
- **NEXT?**

Source: WDR 2021 team.
Safeguarding the Collection & Use of Data: the basis of the trust framework

Countries by safeguards score

Gaps in the regulatory framework for cybersecurity are glaring across country income groups
Example: Kenya

Safeguarding data

A leader in adopting data protection and security measures among LMICs

While overall adoption of cybersecurity measures is low across countries surveyed, Kenya’s new Data Protection Act is an outlier among lower-middle-income countries. It requires good practice measures such as pseudonymization and data encryption, restoring data access after a breach, and managing risks.
Robustness of personal data protection legislation differs markedly across income groups
Limits on automated processing of data

Safeguards for trusted AI

The growing use of algorithms can add significant value but raises risks of bias, data misuse, and lack of transparency and redress. Despite these risks, only 30% of countries surveyed impose limits on their use. Of these Côte d’Ivoire has included provisions in its data protection act that prohibit the use of automated processing of personal data in judicial decision-making to prevent bias.
When given the choice, users opt out of tracking & targeting

Example: The Battle of Big Tech

How Data Protection by Design fosters user trust

- WhatsApp announced change in Terms of Service in January:
  - 4,868% increase in downloads of Signal
  - downloads of WhatsApp fell by 16%
  - Delft City Council votes to drop WhatsApp in protest over ToS

- Apple launched iOS 14.5 with enhanced data protection
  - 96% of US iPhone users opted out of allowing tracking

Photo: South China Morning Post: https://images.app.goo.gl/ZaCqtDDmJk7jRpx57
Enablers for better data use: enabling equitable value from data for development

Country scores for enablers for trusted use, reuse, and sharing of data for development

Regulations enabling access to and reuse of public intent data are unevenly adopted across country income groups.
Enabling reuse of public intent data

The role of Open Licensing regimes

While only 40% of middle-income countries have done so, Jordan and Mauritius are two that have adopted Creative Commons Attribution 4.0 International Licenses for government datasets released as open data. This can boost uptake by providing certainty to potential users of the terms under which they can use the data for innovation, monitoring, research, etc.
Adoption of enablers for sharing private intent data lags behind those for public intent data.
Enabling private intent data sharing through policies and partnerships

Sharing “High value” datasets

France and the EU require “high value” or “public interest” datasets to be made available according to open standards and in machine-readable formats. Alternatively, companies such as Waze have forged data partnerships with governments: through its Connected Citizens Program, the traffic app has partnered with over 1,000 cities and public sector entities to exchange traffic data to inform mobility projects, support emergency response and share data with citizens.
Enabling better data use requires open, harmonized standards for data interoperability

Enabling data access & interoperability:

“It is imperative that a standardized reporting system for systematically collecting, visualizing and sharing high-quality [health] data: granular and made available at a spatial and temporal scale, in machine readable formats, based on open standards.” – Dr. Lauren Gardner, creator of JHU COVID-19 Dashboard

Source: https://coronavirus.jhu.edu/map.html
1. COVID-19 has exacerbated the importance of enablers and safeguards in fostering trust in data use and reuse to create equitable value.

2. Personal and non-personal data require a differentiated approach to the way in which enablers and safeguards are developed.

3. This distinction is becoming blurred making it harder to develop rules to govern data, particularly for cross-border data transactions.

4. Further efforts are needed to improve interoperability and proactive disclosure of data, sharing of private intent data, and cybersecurity and cybercrime.

5. Policymakers grapple with adapting evolving good practices to country-specific exigencies.

6. Take a holistic approach to the legal enabling framework for the data economy, along with corresponding technical, infrastructural and institutional approaches.
Download the report and explore Data Stories at https://wdr2021.worldbank.org/

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