

SoK: Technical Implementation and Human Impact of Internet Privacy Regulations

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Paper Selection

Goal: Systematize the computer science literature that evaluates the impact of comprehensive data protection and Internet privacy regulations.

Step 1: Identified 10 top computer science conferences that publish papers about privacy:

1. IEEE Symposium on Security and Privacy
2. ACM Conference on Computer and Communications Security (CCS)
3. USENIX Security Symposium
4. Privacy Enhancing Technologies Symposium (PETS)
5. Network and Distributed System Security Symposium (NDSS)
6. Symposium on Usable Privacy and Security (SOUPS)
7. ACM Conference on Human Factors in Computing Systems (CHI)
8. ACM Conference On Computer-Supported Cooperative Work And Social Computing (CSCW)
9. ACM The Web Conference (WWW)
10. ACM Conference on Fairness, Accountability, and Transparency (FACT)

Step 2: Starting from the full set of papers published in those 10 venues between January 2017 and August 2023, iteratively identified relevant papers.

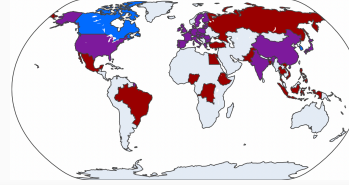


Step 3: To validate scope decisions, double-coded all 1,357 papers published at USENIX Security between 2017- 2023 ($\kappa = .842$).

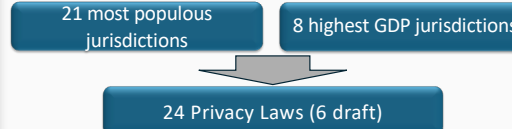
Legal Taxonomy

Goal: Taxonomize legal rights, privileges, requirements, and obligations that appear in comprehensive data protection regulations and Internet privacy laws globally.

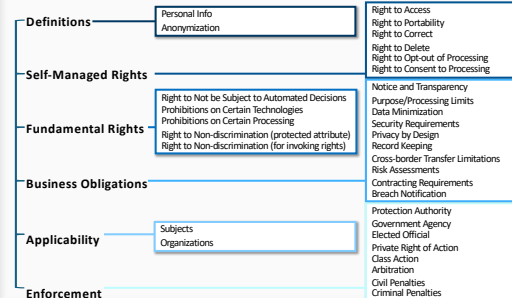
Step 1: Identified the most populous jurisdictions (cumulatively 75% of global population) and the richest jurisdictions (cumulatively 75% of global GDP).



Step 2: Identified which of those jurisdictions have comprehensive data protection or Internet privacy laws. If not, identified which have draft regulations.

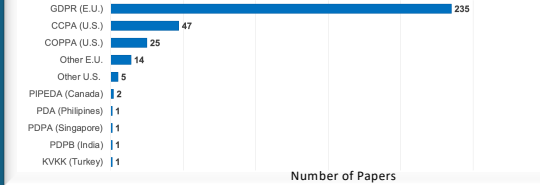


Step 3: Close reading of 24 laws by legal experts to construct legal taxonomy.

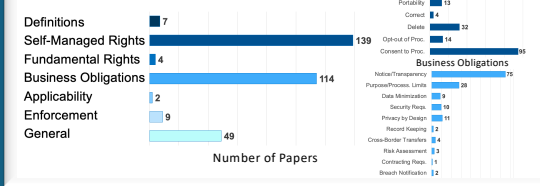


Results

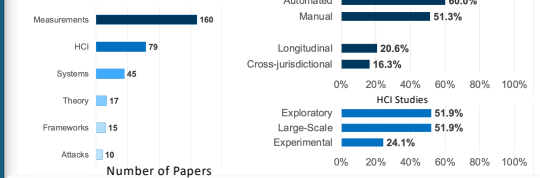
Laws Studied



Legal Aspects Studied



Research Methodologies



Recommendations: Computer science researchers should

1. Prioritize longitudinal and cross-cultural work at the intersection of technology and privacy law.
2. Extend our efforts to evaluate the implementation and impact of currently under-studied aspects of privacy regulations.
3. Expand our efforts to evaluate and amplify non-self-management aspects of privacy and data protection regulations.
4. Explore how technical expertise and methodology might evaluate proposed regulations and regulatory approaches in addition to laws currently in effect.