



Shri Vile Parle Kelavani Mandal's

DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

(Autonomous College Affiliated to the University of Mumbai)

NAAC Accredited with "A" Grade (CGPA : 3.18)



Department of Computer Science and Engineering (Data Science)

A.Y.: 2024-25

Class/ Sem: B.Tech/ Sem-VIII

Sub: Data Ethics

Tutorial-8

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Research, analyze and compare the following data governance and regulation frameworks that exist:

1. European Union's General Data Protection Regulation (GDPR)
2. California Consumer Privacy Act (CCPA)
3. USA's Health Insurance Portability and Accountability Act (HIPAA)
4. Singapore's Personal Data Protection Act (PDPA)
5. China's Personal Information Protection Law (PIPL)

1. European Union's General Data Protection Regulation (GDPR):

Region: European Union (EU).

Scope: Personal data protection and privacy for all EU citizens and residents.

Key Features:

- Requirement for explicit consent for data collection.
- Right to access, right to be forgotten, data portability.
- 72-hour breach notification requirement.
- Privacy by design and by default.
- Potential fines up to 4% of annual global revenue.
- Appointment of Data Protection Officers.
- Impact assessments for high-risk processing.



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2. California Consumer Privacy Act (CCPA):

Region: California, USA.

Scope: Protection of personal information of California residents.

Key Features:

- Right to know what personal information is collected.
- Right to delete personal information.
- Right to opt-out of the sale of personal information.
- Right to non-discrimination for exercising CCPA rights.
- Applies to for-profit businesses meeting specific thresholds.
- Requires specific privacy notices.
- Private right of action for data breaches.

3. USA's Health Insurance Portability and Accountability Act (HIPAA):

Region: United States

Scope: Protection of sensitive patient health information.

Key Features:

- Privacy Rule establishing standards for PHI protection.
- Security Rule for safeguarding electronic PHI.
- Breach Notification Rule for reporting unauthorized disclosures.
- Patient rights to access and amend their health records.
- Business Associate Agreements for third-party vendors.
- Limited dataset provisions for research purposes.
- Civil and criminal penalties for violations.



4. Singapore's Personal Data Protection Act (PDPA):

Region: Singapore.

Scope: Governance of collection, use, and disclosure of personal data.

Key Features:

- Consent, purpose limitation, and notification requirements.
- Access and correction rights.
- Data protection and retention limitations.
- Do Not Call Registry for telemarketing controls.
- Accountability principle requiring data protection policies.
- Mandatory data breach notification.
- Data portability obligation.

5. China's Personal Information Protection Law (PIPL):

Region: China.

Scope: Protection of personal information of individuals in China.

Key Features:

- Informed, specific consent requirements.
- Data localization for critical information infrastructure.
- Data processing principles including necessity and transparency.
- Cross-border data transfer restrictions.
- Special protection for sensitive personal information.
- Algorithmic decision-making regulations.
- Severe penalties up to 5% of annual revenue.



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Comparison:

Framework	Scope	Key Strengths	Challenges
GDPR	Comprehensive protection for EU citizens.	Strong individual rights, high penalties for non-compliance, global influence.	Compliance complexity, resource-intensive implementation, variable enforcement across countries.
CCPA	Protection limited to California residents.	First comprehensive state privacy law in the US, opt-out rights, private right of action.	Limited geographical scope, complex compliance for multi-state operations, lack of universal definitions.
HIPAA	Sector-specific for healthcare information.	Established framework, detailed security standards, consistent enforcement.	Limited to the healthcare sector, doesn't address all modern data challenges, focused on covered entities only.
PDPA	National framework for Singapore.	Balanced business-friendly approach, pragmatic implementation, comprehensive coverage.	Less prescriptive than GDPR, evolving interpretation, penalties may be less deterrent.
PIPL	National framework with extraterritorial reach.	Strong data localization, strict consent requirements, algorithmic regulation.	Recent implementation, regulatory uncertainty, challenging cross-border requirements.



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