



Effective Data Governance in Action

Experience Sharing Session by Privacy-Friendly Awardees 2025

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Practical strategies for implementing proactive and effective data governance to manage and safeguard sensitive customers' personal data at scale

推行積極高效的數據管治的實務策略，以妥善處理及保障大量敏感的客戶個人資料



Privacy controls/measures taken to enhance data security in response to emerging privacy challenges

為提升數據安全及應對未來私隱挑戰所採取的私隱保障措施



How to leverage technology for privacy protection

如何借助科技提升私隱保障



Data Governance Framework





Data Governance Framework

Policy

People

Process

Technology

Rules for managing data

Clear ownership with defined roles

Standardised data lifecycle workflows

Automated discovery and monitoring



Policy

- Identify applicable regulatory and legal requirements
- Define lawful purposes and retention periods for data
- Ensure data usage aligns with stated policies and notices
- Conduct regular compliance reviews and audits
- Maintain documentation and evidence for regulatory accountability

People

- Data Owner – Accountable for data and risk
- Data Steward – Manages and governs data quality and usage
- Data Custodian – Protects and operates data technically
- Data User – Uses data responsibly for approved purposes

Process

- Define and standardise data lifecycle management (collect, use, store, delete)
- Establish data classification and handling rules based on risk
- Ensure data quality controls and issue remediation
- Govern data access, usage, and sharing, including third parties
- Embed privacy, security, incident handling, and continuous review into operations

Technology

- Enable data discovery, inventory, and classification across systems
- Enforce access control and identity management using least-privilege principles
- Implement data protection controls (encryption, masking, backup, recovery)
- Provide monitoring, logging, and Data Leakage Prevention to detect and prevent data misuse
- Automate data lifecycle management, including retention, archiving, and deletion



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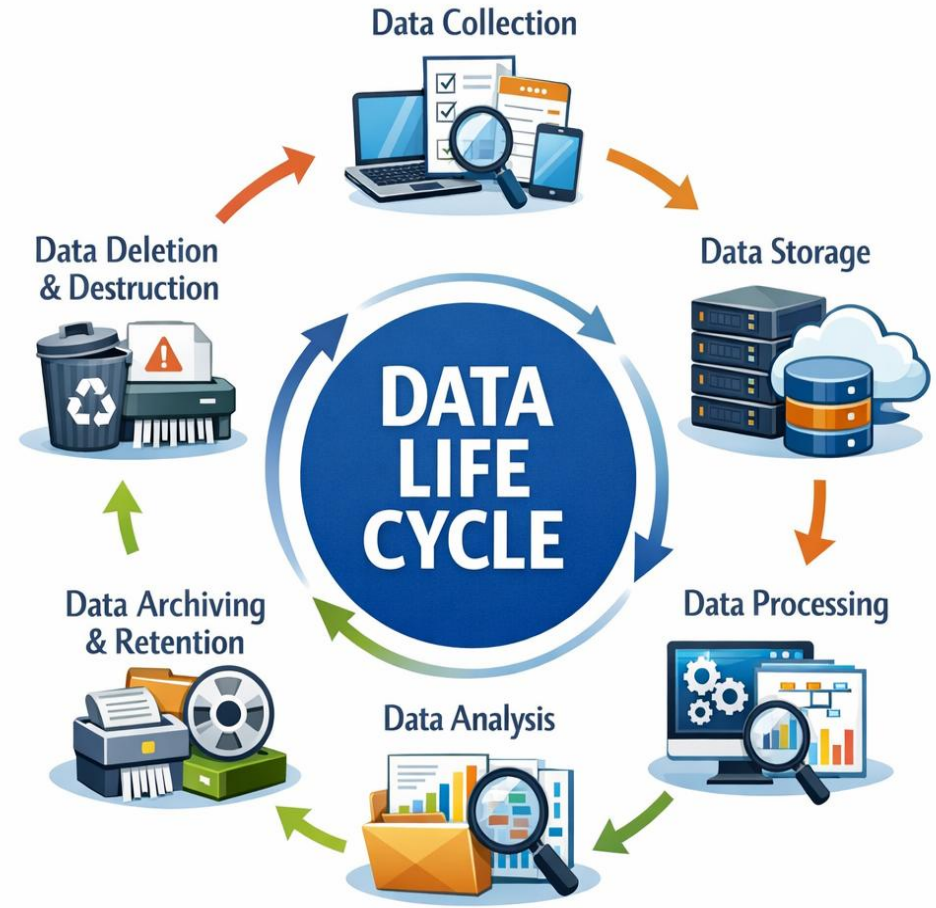
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Data Life Cycle





Key focus

- Legitimacy & Purpose – Data is collected for clear, lawful, and defined business purposes
- Data Minimisation – Only necessary and relevant data is collected
- Accuracy & Quality – Data is correct, complete, and fit for use
- Transparency & Consent – Individuals are informed and consent is obtained where required
- Security at Entry Point – Data is protected at the point of capture
- Regulatory Compliance – Collection complies with applicable laws, regulations, and policies



Data Storage



Key focus

- Confidentiality & Security – Data is protected against unauthorised access and breaches
- Integrity – Data remains accurate, complete, and unaltered during storage
- Availability & Resilience – Data is accessible when needed and protected against loss
- Compliance – Storage meets legal, regulatory, and policy requirements
- Location & Residency – Data is stored in approved locations (on-perm / cloud / region)
- Lifecycle Alignment – Storage supports retention, archiving, and deletion requirements



Key focus

- Purpose Limitation – Data is processed strictly for approved and defined purposes
- Accuracy & Data Quality – Processed data remains correct, consistent, and reliable
- Privacy & Confidentiality – Personal and sensitive data is protected during processing
- Security Controls – Processing activities are safeguarded against unauthorised access or misuse
- Compliance – Processing complies with applicable laws, regulations, and internal policies
- Traceability & Accountability – Processing activities are documented and auditable



Key focus

- Purpose Alignment – Analysis is conducted for approved, legitimate business objectives
- Data Quality & Reliability – Analysis is based on accurate, complete, and trusted data
- Privacy & Confidentiality – Personal and sensitive data is protected during analysis
- Security of Analytical Environment – Analytical tools and platforms are securely controlled
- Fairness & Ethics – Analysis avoids bias, misuse, or unethical customers (especially for AI/advanced analytics)
- Accountability & Transparency – Analytical assumptions, logic, and outputs are explainable and auditable



Data Archiving & Retention



Key focus

- Regulatory & Policy Compliance – Data is retained in accordance with legal, regulatory, and policy requirements
- Data Minimisation – Data is retained only for as necessary
- Security of Archived Data – Archived data remains protected from unauthorised access or loss
- Integrity & Authenticity – Archived data remains accurate, complete, and tamper-proof
- Accessibility & Recoverability – Archived data can be retrieved when required
- Clear Accountability – Ownership and responsibility for retained data are clearly defined



Key focus

- Regulatory & Policy Compliance – Data is deleted in accordance with retention schedules and legal requirements
- Data Minimisation – Data is permanently removed once it is no longer required
- Irreversibility – Deleted data cannot be recovered or reconstructed
- Security Assurance - Deletion methods prevent unauthorised recovery or data leakage
- Consistency Across Media – Data is securely removed from all systems, backups, and physical media
- Accountability & Auditability – Deletion activities are authorised, documented, and verifiable



Technology for Privacy Protection





Data Leakage Prevention (DLP)

Identity Access Management (IAM)

Endpoint Detection and Response (EDR)



Data Leakage Prevention

Data Identification & Classification

- Identify sensitive data
- Apply consistent data classification and labelling standards

Policy Definition & Governance

- Define DLP policies aligned with regulatory and business requirements
- Set clear rules for data handling, sharing and transfer

Monitoring & Detection

- Monitor data in use, in motion, and at rest across endpoints, email, cloud and network
- Detect unauthorised access or sharing

Preventive Controls

- Enforce controls such as blocking, quarantining, encryption
- Apply least-privilege access and conditional controls based on risk



Identity Access Management

Strong Authentication (Multi-factor authentication)

- Enforce MFA for privileged, remote and sensitive system access
- Apply risk based or adaptive authentication
- Disable legacy or weak authentication protocols
- Regularly review MFA coverage and exceptions

User Access Provisioning & De-Provisioning

- Integrate IAM with HR systems where possible
- Immediately revoke access upon termination or role change
- Validate access request against approved roles and data classifications
- Define and maintain business-aligned roles and role matrices (Role Based Access Control)
- Prevent ad-hoc or direct user-level entitlements

Privileged Access Management (PAM)

- Vault and rotate privileged credentials
- Enforce session monitoring and logging
- Restrict direct admin access to production systems
- Review privileged account usage regularly



Endpoint Detection & Response

Threat Detection & Behavioural Monitoring

- Detect malware, ransomware attack
- Identify suspicious data access or mass file operations
- User behaviour based detection beyond signature matching

Data Exfiltration & Leakage Detection

- Monitor unusual outbound network connections
- Detect abnormal use of removable media
- Flag unauthorised data compression, encryption or bulk transfer
- Correlate endpoint activity with DLP and network controls

Ransomware & Data Destruction Protection

- Detect early indicators of ransomware behaviour
- Automatically stop file-encryption processes
- Trigger immediate containment on ransomware detection