

Data Governance

1) Data Source Integrity

Ensure trusted, complete, and consistent input data.

- Is the data source authoritative and trusted?
- Is the data complete and up to date?
- Has the data been altered or corrupted in transit?

2) Quality Assurance

Ensure data meets standards before use.

- Is all required data present and complete?
- Do the values conform to expected formats and business rules?
- Are there any duplicates or inconsistencies in the data?

3) Business Rule Enforcement

Ensure rules are consistently applied.

- Is all required data present and complete?
- Do the values conform to expected formats and business rules?
- Are there any duplicates or inconsistencies in the data?

4) Structure

Ensure data matches expected format and structure.

- Is all required data present and complete?
- Do the values conform to expected formats and business rules?
- Are there any duplicates or inconsistencies in the data?

5) Error Handling

Handle, log, and recover from data issues.

- What happens when data fails validation or processing rules?
- Are errors logged, categorized, and monitored in real time?
- Is there a defined process for resolving errors and reprocessing data?

6) Monitoring

Track data flow health and detect issues early.

- What metrics are tracked to ensure data flow health and performance?
- Are there alerts or dashboards in place to detect anomalies or failures?
- How frequently is monitoring reviewed, and by whom?

7) Security

Protect sensitive data and ensure legal compliance.

- Is sensitive data (e.g., PII, financial info) properly protected and masked where necessary?
- Are data access controls and permissions enforced throughout the pipeline?
- Does the data flow comply with relevant regulations (e.g., GDPR, CCPA)?

8) Continuous Improvement

Refine and evolve processes continuously.

- How are lessons from past data issues or failures captured and applied?
- Is there a feedback loop from data consumers to improve data quality or processes?
- Are validation rules, monitoring tools, and error handling mechanisms regularly reviewed and updated?

Perform Root Cause Analysis if metrics are not met.

Follow security step if issue arise.