· Data quality metrics Data quality processing documentation · Data quality rules implemented in database and software, documented as requirements Level 2: Managed 2.1A data quality strategy is defined, approved, and managed. The fundamental objective of the data quality strategy is to encapsulate the organization's plans to assure that data is fit for purpose and meet business needs. The strategy should be designed to facilitate moving from the current state to the target state; it should explicitly align with business objectives drivers and the organization's data management strategy. At a minimum, a data quality strategy should include the components below: Quality goals and objectives

The data quality strategy is supported by policies, plans, and processes, which define standards and quidelines for how activities are conducted that are

Processes and policies should contain guidance for profiling, cleansing, assessment, and monitoring activities that are applied across projects. These

A variety of ways and adjectives are used to describe dimensions of quality. Industry vendors and experts in data quality measurement will describe from

It is important to ensure that the strategy can be accomplished based on the operational models defined by the organization for data management func-

tions. Efforts to achieve increased quality can be significant, so the correct level of quality for the purpose must be identified, and the effort to achieve it

activities can be applied to areas such as data store consolidations, data warehousing, source to target transformation, data conversion, etc.

Refer to Data Requirements Definition for assistance in determining data quality objectives and development of detailed requirements.

2.5 The data quality strategy is created with reference to business objectives and plans, and is approved by executive management.

must be balanced and in alignment with business plans. The business plans are key drivers to development of the data quality strategy

3.1 The data quality strategy is followed across the organization and is accompanied by corresponding policies, processes, and guidelines.

3.2 Roles and responsibilities for governance, implementation, and management of data quality practices are defined.

monitored and adjusted as appropriate to reflect execution of the data quality strategy.

the data quality strategy and the cost-benefit analysis

• Data management standards providing quality criteria and guidelines

4.1 Data quality metrics are employed to analyze proposed changes to the data quality strategy.

quality issues and using that information to help support these decisions is therefore critical.

Data quality business rules organized around subject areas

Data quality strategy approvals

Approved policies and processes

Standard data quality processes

Level 4: Measured

Embedded SDLC data quality processes

Approved data quality metrics

3.3 A defined process for defining benefits and costs for data quality initiatives is employed to guide data quality strategy implementation.

The data quality strategy should provide justification for the value and importance of implementation outcomes. A clear value proposition should be

established for executing the strategy. Determination of the benefits and costs of data quality may include an ROI analysis, cost implications of defects,

Institutionalization of the data quality strategy includes ensuring that as new data management systems and data warehouses are developed, principles

and requirements are embedded as a part of the development lifecycle. It is equally important that the plans for and execution of development activity are

3.5 Data quality projects, such as data profiling, data assessments, data cleansing, and risk assessments are aligned with the business needs identified in

4.2 Prioritizing data quality issues for remediation or prevention is evaluated quantitatively. Priorities are regularly reviewed and adjusted to address

Efforts and costs to address quality issues can be substantial. It is important to ensure that prioritization and decisions relating to these activities are

accomplished in an informed manner so that the costs are aligned with the value and achievement of business objectives. Quantitatively evaluating the

The performance of policies, processes, and guidelines, which are defined to support the data quality strategy, are adjusted based on performance

5.1 Data quality program milestonesand metrics are regularly reviewed by executives, and continuous improvements are implemented.

2.4 Data quality requirements are articulated employing data quality dimensions selected by the organizations.

Data quality objectives, rules, and criteria are documented. Project level criteria include established standards, control processing, and metrics such as

Data requirements should be consistent with the language of the business and employ standard approved business terms when available.

Business benefits and impact (by line of business within scope)

Functional Practice Statements - Data Quality Strategy

1.2 Business stakeholders participate in setting data quality criteria and objectives.

1.3 Data quality plans are followed; rules are implemented; criteria are monitored.

Level 1: Initial

error rates and quality thresholds.

Example Work Products

· Data quality plans, criteria, and rules

Status updates against plans

Meeting notes or reviews from stakeholders

1.1

 Implementation priorities Quality criteria · Policies and governance Compliance process

• A sequence plan to guide implementation It should also include guidelines related to data profiling, expectations, and rules that help guide data cleansing projects.

Data Requirements Definition will assist in determining data quality objectives. Refer to Data Management Strategy for information to aid in development of the data quality strategy—these two process areas have a symbiotic relation-

ship.

2.2 Business stakeholders participate in creating the data quality strategy. 2.3 The organization has established policies, processes, and guidelines to implement the data quality strategy.

necessary to achieve the organization's quality goals.

seven to nine distinct dimensions. What is most important is that the organization determine what dimensions are most important to them, describe the dimensions, use them to guide development of requirements, establish criteria to guide activities, and use them to assess levels of quality in a standardized fashion.

2.6 Plans to meet the goals and objectives of the data quality strategy are monitored to evaluate progress. **Example Work Products** Data quality strategy Data quality sequence plan with key milestones identified

Level 3: Defined

Alignment with business strategy

Prioritizations of subject areas

The strategy should include consideration of the following:

· Targets and thresholds associated with business objectives

Alignment with organizational data and architectural standards

Overall data management strategy and objectives

 Requirement to employ data quality dimensions Process for approving data quality rules · Guidelines and criteria for data profiling, assessment, and cleansing activities Sequence plan to guide implementation Identification of critical projects with dependencies mapped

and business opportunities tied to improvements. 3.4 The policies, processes, and governance contained in the data quality strategy are anchored across the data lifecyle, and corresponding processes are mandated in the system development lifecycle methodology.

3.6 A sequence plan for data quality improvement efforts across the organization is developed, monitored, and maintained. The sequence plan is monitored by data management with input from governance bodies. **Example Work Products**

Producing a strategy to meet the data quality needs of the organization is not a once-and-done activity. Once developed, the execution of the strategy must be closely monitored, as well as the changing needs of the business. Both must be regularly evaluated to ensure the strategy achieves, and continachieve, the business needs for quality. As shortfalls are identified or gaps are discovered, the strategy must evolve, which may involve changes of focus or adjustments to ongoing projects.

4.3 Stakeholder reports of data quality issues are systematically collected. Their expectations for improving data quality are included in the data quality strategy, and are measured and monitored. Documented business needs and data quality criteria and stakeholder expectations do not always match. Unless stakeholders have been involved in the development of the data quality strategy, it is easy for them to believe that their quality expectations are not being met. To guard against this and ensure that the levels of quality are meeting business needs, the success factors and criteria by which the data quality strategy will be measured must be devel-

o ped with stakeholder input.

metrics analysis results.

Example Work Products

Approved changes to the data quality strategy

changing business objectives.

 Approved changes to policies, processes, and metrics Standard metrics based on analytical reports of data quality progress Approved modifications to the data quality strategy, sequence plan, or supporting policies, processes, and plans **Level 5: Optimized**

5.2 The organization shares best practices and successful approaches to improving data quality with industry peers. Implementation of standards—direct quality standards as well as architecture standards—is important to meet quality objectives. Standards can include the following:

 Data quality shared services Ontologies and taxonomies **Example Work Products** · Presentations, white papers, and articles communicating best practices for data quality strategy

 Data exchange standards (e.g., XML) • Performance metrics for quality rules

· Data architecture standards