Data quality issue

Definition

A data quality issue is an issue with regard to data quality.

Notes

Generally, a data quality issue concerns an incorrect data value, but it may also involve any other data quality dimensions, e.g., completeness and timeliness.

Attributes of a data quality issue are:

- Description of a data quality issues
- Classification of a data quality issues
- Impact, severity/urgency
- Assignment of the data quality issues to a person who will resolve the data quality issues
- What is changed, why en how in the resolution of a data quality issues
- Resolution time/Duration

Synonym(s)

- Data anomalies
- Data error
- Data quality incident
- Defect
- Error
- Nonconformity

Lifecycle

Phase	Activity
Plan	* To detect or identify data quality issues * To determine if similar data quality issues exist * To register data quality issues * To count the number of data quality issues * To categorize or classify data quality issues * To diagnose data quality issues(‘root cause analysis’) * To formulate options for remediation of data quality issues. * To assess the business impact of data quality quality issues(‘severity’) * To prioritize data quality issuesbased on business impact (by data owners and data stewards) * To eventually escalate data quality issues. See figure.

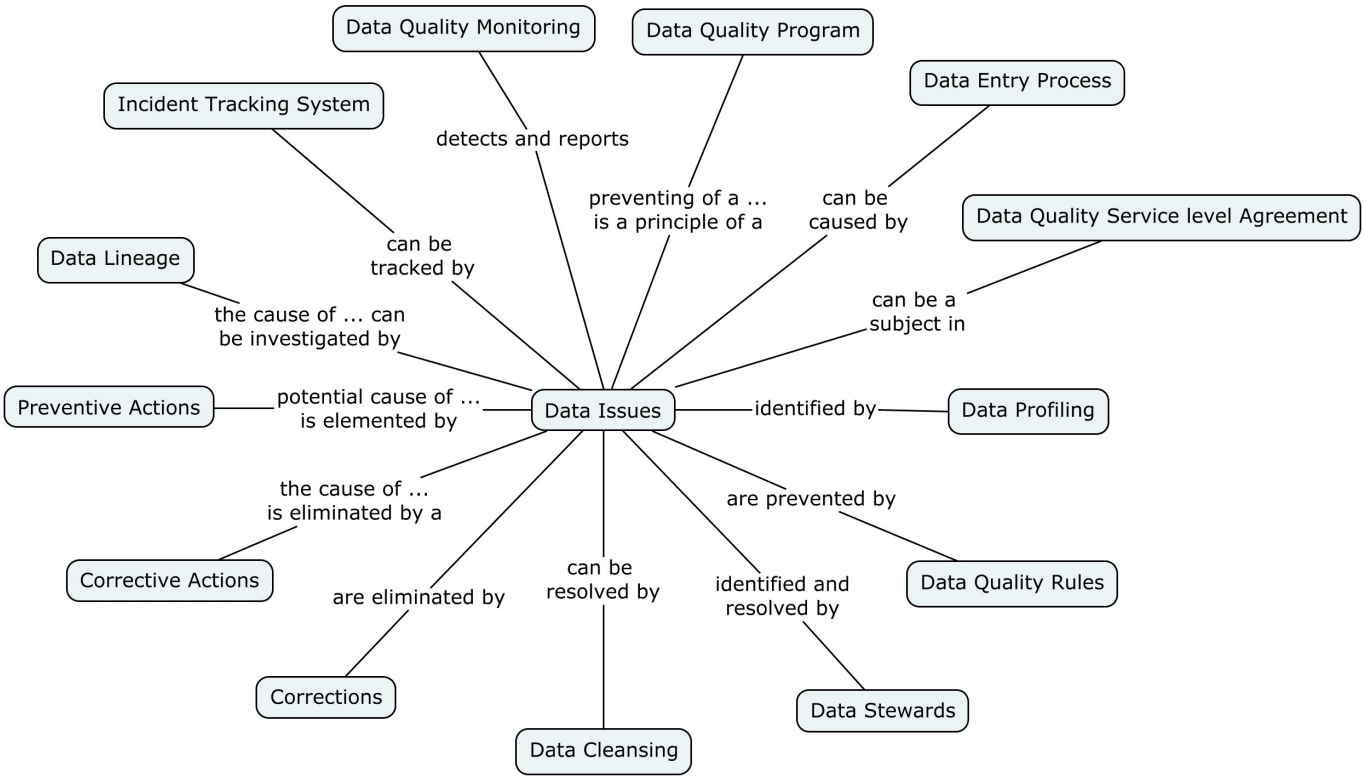
Do	* To eliminate or resolve a data quality issues(‘correction’, ‘remediation’, ‘scrubbing’ or ‘cleansing’) * To eliminate the cause of a data quality issuesto prevent recurring (‘corrective action’) * To eliminate the cause of a potential data quality issues(‘preventive action’) * To deal with the consequences of the data quality issues, e.g., to report data isquality issuessues to data users * To document actions taken.
Check	* To monitor the status of data quality issuesand their resolutions. * To review the effectiveness of corrective and preventive action.
Act	* To adapt corrective and preventive action.

Characteristics

Characteristic	Requirements
Severity	Data quality issuesare resolved in order of severity.

Relations

Data quality issue	is child of	issue
Data quality issue	is an element of a	data quality management system
Data quality issue	is one of the principles of a	data quality program
Data quality issue	can be caused by	data entry processes
Data quality issue	can be caused by	data migration
Data quality issue	is a subject in a	data quality service level agreement
Data quality issue	is identified by	data profiling
Data quality issue	is prevented by applying	data quality rules
Data quality issue	is identified and resolved by	data stewards
Data quality issue	is resolved by	data cleansing
Data quality issue	is eliminated by	corrections
Data quality issue	is prevented by	corrective actions
Data quality issue	is prevented by	preventive actions
Data quality issue	can be easiers assessed by	data lineage
Data quality issue	can be tracked in an	incident tracking system
Data quality issue	is detected and reported by	data quality monitoring



Data quality issues escalation path

The figure shows a possible escalation path of data quality issues.

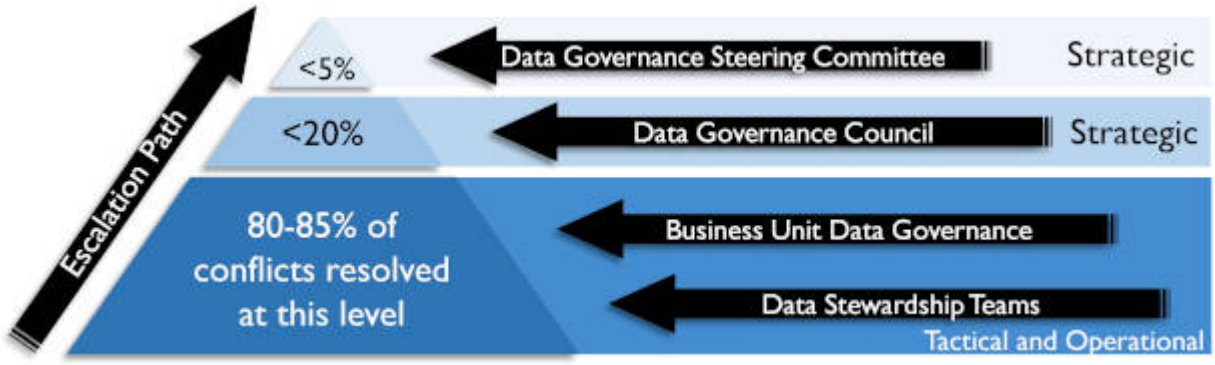


Figure 2: Data quality issues escalation path.

Story

A customer of the TradeAll trade company complained that he had been delivered an incorrect item. The sales department reported this incident in the Incident Tracking System, which was assigned to the Data Steward. The Data Steward then went to see how this could have happened. He found that the item number did not match the item description and suspected that this was due to a data entry error. Based on the item number, the products were taken from the warehouse.

He corrected the item number (Correction), but to prevent this kind of error, he took the measure that the entry of items was checked by a second person to prevent more incidents (Corrective Action). He also made sure to check for duplicate item numbers in the database (Corrective Action).. The customer was apologised for the error and the correct article was delivered as soon as possible.

References

DAMA (2017). DAMA-DMBOK. Data Management Body of Knowledge. 2nd Edition. Technics Publications Llc. August 2017. Chapter 13 Data Quality, section 2.7.3 Develop Operational Procedures for Managing Data Issues.

DAMA Dictionary of Data Management. 2nd Edition 2011. Technics Publications, LLC, New Jersey.

ISO 9000:2015. Quality Management Systems – Requirements.

ISO 9001:2015. Quality Management Systems – Fundamentals and vocabulary.

All, DQMS

From:
https://datamanagement.wiki/ - **Data Management Wiki**

Permanent link:
https://datamanagement.wiki/data_quality_management_system/data_quality_issue

Last update: **2024/03/08 13:33**